



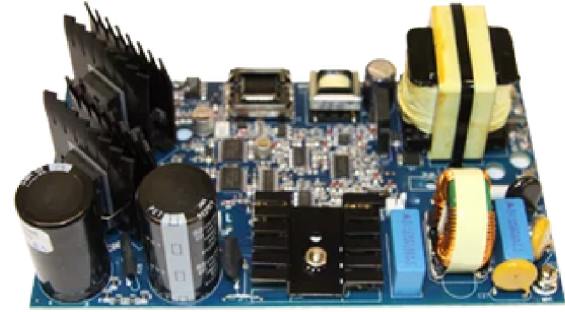
Power Supplies

Economical Arc Lamp Power Supply



Compact Switch-Mode Power Source

The Economical Arc Lamp Power Supply is a compact switch-mode power source tailored for consistent operation of 400/600W mercury vapor or medium pressure metal halide arc lamps. It is offered in both 100/120AC and 200/240 AC versions for international compatibility. Featuring a standby switch, the supply reduces lamp output power to 1/2 for the 400W and 1/3 for the 600W during idle periods, enhancing system efficiency and reducing heat output. The unit also provides a 12V output for a cooling fan and an integrated lamp igniter, eliminating the need for an external starter. Designed for global use, it includes two input voltage range options (90–132AC or 180–265AC), an integrated high-voltage lamp starter with up to 10kV output, and a lamp power regulation system to maintain consistent output. Additionally, it features an on-board ready LED, various safety protections, and operates efficiently within a wide range of environmental conditions. The unit measures 7.25 x 4.25 x 2 inches and weighs 1.5 lbs, combining compactness with robust functionality.



Features



Versatile Power Supply

Designed to power 400/600W mercury vapor or medium pressure metal halide arc lamps, with versions available for both 100/120AC and 200/240 AC inputs, making it suitable for international use.

Energy Efficiency Mode

Includes a standby switch that reduces lamp output power to half for the 400W and one-third for the 600W during idle times, effectively decreasing heat and power consumption.

Cooling and Ignition Integration

Offers an un-isolated 12V output for powering a cooling fan and features an integrated lamp igniter, removing the need for an external high-voltage starter.

Consistent Power Regulation

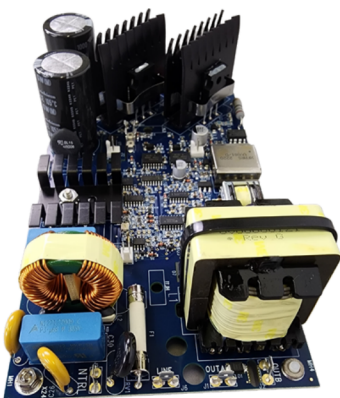
Utilizes an advanced lamp power regulation system that compensates for fluctuations in lamp and line voltage, ensuring consistent output power and repeatable curing times over the lamp's lifespan.

Built-in Safety Features

Comes with an integrated high-voltage lamp starter capable of 10kV output and includes safety measures like timeout shutdown for defective lamps, and protections against various electrical issues.

Compact and Durable Design

The unit's dimensions are 7.25 x 4.25 x 2 inches, with a weight of 1.5 lbs, offering a robust and compact solution ideal for a variety of settings while ensuring efficient operation in diverse environmental conditions.



Dimensions & Specs

- **Lamp Type:** Mercury Vapor or Metal Halide (Medium Pressure)
- **Lamp Power:** 400/600W $\pm 10\%$: Trim pot adjustable
- **Output Voltage:** 140 $\pm 10\%$
- **Wave Shape:** 75Hz Quasi Square (Current/Voltage)
- **Lamp Power Regulation:** $\pm 1\%$
- **Operation:** Continuous Mode
- **L x W x H:** 7.25 x 4.25 x 2" (Including .25" standoffs)
- **Weight:** 1.5lbs

PART #	UV0902 (120V), UV1241 (240V)	UV2279 (120V), UV1242 (240V)
Lamp Power	400W	600W
Input Voltage	100-120 $\pm 10\%$ / 200-240 $\pm 10\%$ VAC	100-120 $\pm 10\%$ / 200-240 $\pm 10\%$ VAC
Input Current <small>(max @ low line, 120VAC)</small>	7 Amps	10 Amps
Input Current <small>(max @ low line, 240VAC)</small>	3.5 Amps	5 Amps
Source Input Frequency	47Hz-63Hz	47Hz-63Hz
Brownouts	80V for 1 minute, system continues to operate normally	80V for 1 minute, system continues to operate normally
Efficiency	93% (Typical)	93% (Typical)

Protection	Value
Inrush Current Limit	Provided
Line Volt Surge Protection	Provided
Short Circuit Protection	Provided
Open Circuit Protection	Provided
Over Temperature Protection	Provided
Ignition Timeout Protection	Provided (210 secs typical)

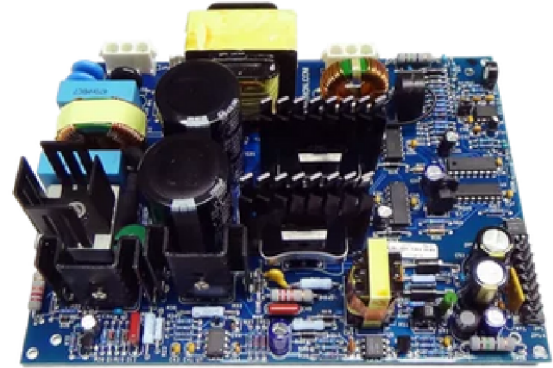
Environmental	Value
Operating Temperature	0 C to +50C
Storage Temperature	0 C to +70C
Humidity	90% relative (with no condensation)
EMI RFI - Conducted	FCC Class A (on board filter)
EMI RFI - Conducted	FCC Class B (with external filter)

Full-Featured Arc Lamp Power Supply



Switching-Mode Power Supply

The Full-Featured Arc Lamp Power Supply is an advanced, switch-mode power source meticulously crafted to consistently power 400/600/800W UV halide or other ultraviolet emitting lamps. Notable for its auto-ranging AC input feature, it accommodates international use without the need for manual voltage configuration. The power supply is equipped with a standby logic signal, enabling a reduction in output power during idle periods to curtail excess heat and power consumption, thereby boosting system reliability and efficiency. Additionally, it houses an isolated 5/24V supply, designed to power system controllers, fans, shutters, and other related components. Key aspects include its auto-range AC line input, which adjusts to 100–120 $\pm 10\%$ / 200–240 $\pm 10\%$ AC without requiring wiring changes or voltage select switching. The unit's lamp power regulation mechanism ensures consistent power by compensating for variations in lamp and line voltage, leading to reliable curing times throughout the lamp's lifecycle. This full-featured power supply merges functional sophistication with practical design, ideal for a wide array of UV lighting applications.



Features



Versatile Lamp Power Options

Capable of reliably powering a range of UV lamps, including 400W, 600W, and 800W UV halide and other ultraviolet-emitting lamps, offering flexibility for different lighting requirements.

Energy-Saving Standby Mode

Equipped with a standby logic signal, the power supply reduces UV arc lamp power to half for 400W, a third for 600W during idle periods, and reduces to 300W for the 800W power supply, effectively minimizing excess heat and power consumption, and thereby enhancing system efficiency and reliability.

Integrated Auxiliary Power Supply

Includes an isolated 5/24V supply, specifically designed for powering additional system components such as controllers, fans, and shutters, adding to the unit's versatility.

Consistent Power Regulation

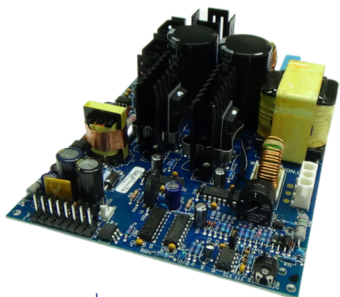
Utilizes an advanced lamp power regulation system that compensates for fluctuations in lamp and line voltage, ensuring consistent output power and repeatable curing times over the lamp's lifespan.

Efficient & Practical Design

The unit is crafted for optimal performance and efficiency, with a focus on reducing ambient temperature rise during operation, making it a practical choice for a variety of UV lighting applications.

Universal Voltage Compatibility

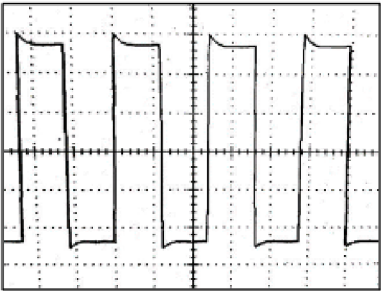
Features an auto-ranging AC input, effortlessly adjusting to 100–120 $\pm 10\%$ / 200–240 $\pm 10\%$ AC, which enables hassle-free use in various countries without the need for manual voltage adjustments.



Dimensions & Specs

- **Lamp Type:** Mercury Vapor or Metal Halide (Medium Pressure)
- **Lamp Power:** 400/600W/800W $\pm 10\%$: Trim pot adjustable
- **Output Voltage:** 140 $\pm 10\%$ function of lamp voltage
- **Wave Shape:** 45Hz Quasi Square (Current/Voltage)
- **Lamp Power Regulation:** $\pm 1\%$
- **Operation:** Continuous Mode
- **L x W x H:** 7.35 x 5.5 x 2.25"
- **Weight:** 1.71lbs

PART #	UV0101	UV0880	UV4426
Lamp Power	400W	600W	800W
Input Voltage	100-120 $\pm 10\%$ / 200-240 $\pm 10\%$ VAC	100-120 $\pm 10\%$ / 200-240 $\pm 10\%$ VAC	100-120 $\pm 10\%$ / 200-240 $\pm 10\%$ VAC
Input Current <small>(max @ low line, 120VAC)</small>	7 Amps	10 Amps	14 Amps
Input Current <small>(max @ low line, 240VAC)</small>	3.5 Amps	5 Amps	7Amps
Source Input Frequency	47Hz-63Hz	47Hz-63Hz	47Hz-63Hz
Efficiency	93% (Typical)	93% (Typical)	93% (Typical)

Lamp	Value	Lamp Output Wave Shape
UV Lamp Power	400/600/800W $\pm 10\%$, trim pot adjustable	
Nominal Lamp Voltage	100V to 170V, function of lamp voltage	
Wave Shape (Current/Voltage)	45Hz Quasi Square	
Power Regulation	$\pm 1\%$	
Operation	Continuous mode	
Maximum Lamp Current	5.5A	
External Lamp Ignitor (sold separately)	PN: UV1998	

Low Voltage	Value
24 VDC Line/Load Regulation	$\pm 10\%$ (40 Watts Max)
5 VDC Line/Load Regulation	$\pm 2\%$ (10 Watts Max)

Protection	Value
Inrush Current Limit	Provided
Line Volt Surge Protection	Provided
Short Circuit Protection	Provided
Open Circuit Protection	Provided
Over Temperature Protection	Provided

Environmental	Value
Operating Temperature	0 C to +50C
Storage Temperature	0 C to +70C
Humidity	90% relative (with no condensation)
EMI RFI - Conducted	FCC Class A (on board filter)
EMI RFI - Conducted	FCC Class B (with external filter)

Programmable Electronic Arc Lamp Ballast

The HiWatt 2 UV Programmable Electronic Arc Lamp Ballast is designed with dual-processor control and a solid-state switching power supply, capable of operating with two power stages: an AC output converter with an igniter for mercury vapor or halide arc lamps, and an auxiliary DC power supply for user controls and cooling fans. It is software configurable via a PC serial port, enabling adaptation to a range of lamp types and utility power sources. The ballast can power arc lamps from 1kW to 20kW with voltages from 200 to 850V and is compatible with 208 / 240 / 480V 60Hz or 200 / 230 / 380 / 415V 50Hz power sources. Two arc lamps can be powered in series if the composite voltage is within the 850V limit. Communication with external controllers or PCs is facilitated through digital logic signals, an RS485 serial port, or USB port, supporting status monitoring and control signals for lamp operation and dimming. Additionally, the HiWatt 2 can control lamp cooling and optional shutters and can be networked for managing multiple units in complex systems.



Features

Dual-Processor Control

The HiWatt 2 features advanced dual-processor control for precision and reliability, ensuring optimal performance for UV arc lamps.

Solid-State Power Supply

With its solid-state switching, the ballast provides efficient power conversion for a wide range of lamp types, including mercury vapor and halide arc lamps.

Configurable Output

The ballast is programmable to accommodate lamps with power ratings from 1kW to 20kW and voltages from 200 to 850V, making it versatile for various industrial applications.

Universal Compatibility

Engineered to work with both single and three-phase AC sources, the HiWatt 2 can operate on 208/240/480V 60Hz or 200/230/380/415V 50Hz, catering to global electrical standards.

Total Lamp Power Control

Continuously variable 15-100% stepless lamp output power, with user-defined lamp-intensity vs speed function that ensures compatibility with variable speed machines

PC/PLC Control Interface

The HiWatt 2 can communicate with customer-connected controllers or PCs via optically isolated digital logic signals, RS485 serial port or USB port. The logic signals include status lines for lamp ignited, lamp ready (warm-up-complete) and unit alarm, as well as control signals for lamp enable / disable and lamp dimming (via PWM control, pulse frequency or 0-10V).



Dimensions & Specs

- **System Type:** Continuous mode arc lamp power supply
- **Lamp Type:** Mercury Vapor or Metal Halide (Medium Pressure)
- **Lamp Power:** 1,000-20,000W
- **Input Voltage:** 200-480VAC, 1 or 3 phase (programmable)
- **Input Current (Max):** 30 Amps maximum
- **Size (H x W x D):** 20.11 x 8.71 x 4.13"
- **Weight:** 26.5lbs
- **Lamp Output Volts:** 200-850 VRMS
- **Low Voltage Outputs:** 24VDC at 6 Amp
- **Other Features:** Lamp temperature control, USB, RS485, digital I/O signals

General	Value
Part #	UV2978 (HiWatt 2 UV Programmable Electronic Arc Lamp Ballast)
Efficiency (Typical)	92 - 96%, lamp type & input voltage dependent
Connectors	Pluggable terminal blocks for input & lamp, 15 & 25 pin DSUB for low voltage & control
Controls & Indicators	Run/Stop switch, bicolor flashing diagnostic LED
Fan/Auxiliary Outputs	24V @ 6A, DC Voltage

Lamp	Value
Lamp Type	Mercury vapor/metal halide, medium pressure
Output Voltage	200 to 850 VRMS
Output Current	Up to 25A RMS max
Wave Shape (Current/Voltage)	±2%, line & lamp
Operation	Continuous mode
Lamp Igniter	Integrated, time limited repetitive strike

Environmental	Value
Operating Temperature	+10°C to +40°C
Storage Temperature	0°C to +60°C
Relative Humidity	30 to 75% operating, 10 to 100% storage
Cooling	Forced air, internal dual fan

Protection	Value
Inrush Current Limit	Provided
Line Volt Surge Protection	Provided
Lamp to Ground Short	Provided
Output Short Circuit	Lamp & 24V
Output Open Circuit	Limited to 1100V RMS, Hot re-strike

Accessories

PART	Item	Details
UV4342	HiWatt Interface Configuration Software	USB flash drive, used for programming monitor & control
UV1825	Touch Screen Panel PC	1GB RAM, 160GB HDD, Windows Embedded OS
UV3384	USB to Isolated RS485/RS422 Adapter	Port-powered, includes USB cable, terminal & drivers CD
UV4038	Shielded Cat. 5 USOC-4 Patch Cable	10ft. For connecting UV3384/RS485 adapter to HiWatt
UV1810	HiWatt Interface Touch Screen Software	CD ROM, network up to 8 ballasts
UV4036	HiWatt 2 Ballast Instruction Manual	Usage and maintenance info for HiWatt
UV1557	Lamp output 3 position pluggable terminal block	Lamp output mating connector
UV3224	AC power input 4 position pluggable terminal block	AC input mating connector
UV3469	DB15 female control signal terminal block	For field termination
UV1598	DB25 female control signal terminal block	For field termination
UV3470	DB15 control signal terminal block gender changer, male/male	Used with UV3469
UV1596	DB25 control signal terminal block gender changer, male/male	Used with UV1598
UV2260	Airflow damper with actuator	Lamp temperature regulator, 6" diameter
UV1678	Thermistor, lamp temperature	4" long, 3/16" diameter, 10K ohms
UV1679	Thermistor, compression fitting	1.81" long, 3/16" dia, .25" male NPT

Radiometers

EIT SpotCure Radiometer



EIT 2.0™ LLC SPOTCURE® UV INTENSITY METER



EIT SpotCure® UV Intensity Meter

The EIT SpotCure UV Intensity Meter is an easy, portable, effective method of quantifying UV output in spot systems. It is the standard to which small area and spot curing processes are established, validated and verified. The SpotCure can also be used to evaluate different equipment.

In a production environment, the EIT SpotCure can be used to:

- Monitor UV spot curing system performance
- Measure individual UV lamp performance
- Measure light guide degradation and/or contamination
- Optimize light guide positioning
- Meet quality requirements

The SpotCure is:

- Compact in size and easy to use
- Portable and an electro-optic based instrument
- Self-contained without having to manage cords and/or connector cables
- Battery powered with a long lasting battery (> 100,000 readings)
- Able to accept multiple light guide sizes with the three included adaptors

The EIT SpotCure UV Intensity Meter is designed to provide the operator with instant feedback on the performance of the spot curing system.

Its compact, flashlight-like shape (4.60" long by 1.74" diameter) can comfortably be gripped in one hand. The measurement head which contains the optics, is attached to one end of the cylindrical instrument. Light guide adaptors that fit into the measurement head are available to fit most size light guides.

The Standard Range supports intensities up to 20W/cm² and the Extended Range supports intensities up to 100W/cm²

Operation

The instrument is gripped in one hand while the light guide is inserted with the other hand. Once a spot curing system's light wand is inserted into the measurement head, the "START" switch is depressed and a measurement is taken. When the "START" switch is released, the measurement is frozen and can be viewed on the LDC display. It will be held for approximately 3 minutes until the display times out or until the "START" switch is depressed again. Adapters insert into the measurement head to accommodate the standard light wands on the market. This flexibility allows the instrument to be used in a variety of monitoring applications.

Short, simple operation instructions are printed on the outside of the instrument. The EIT SpotCure UV Intensity meter is designed to withstand the rugged UV environment and extremely high intensities that can be associated with UV spot curing.

SpotCure Product Specifications

Feature	Description
UVA Spectral Response	320-390 nm
Intensity Ranges	Standard Version: 0-19.99 W/cm ² (EIT Part Number: SP1-365-EIT) Extended Range Version: 0-99.9 W/cm ² (EIT Part Number: SP1-365-EIT-ER)
Resolution	Standard Version: 10mW/cm ² / Extended Range Version: 100 mW/cm ²
Accuracy	+/- 10%; +/- 5% typical plus ±0.3% of full scale
Operating Temperature	0-70°C
Display	3½ digit LCD
Display Time	Approximately 3 minutes
Power Source	Lithium battery stick Please contact EIT for further information on the battery test results
Battery Life	12,500 hours of continuous operation (over 100,000 readings)
Dimensions	Overall: 6.40" L x 1.74" Diameter (16.26 x 4.42 cm) Measurement Head: 2.13" Diameter (5.41 cm)
Weight	12.8 oz. (358 grams)
Materials	Aluminum, polyester, quartz
Supplied with	NIST traceable calibration certificate Carry Case and Quick Guide Instructions Three light guide adaptors (5, 7, 10 mm)

Designed and manufactured in the USA/Specifications are subject to without notice

ABOUT EIT 2.0 LLC

EIT 2.0 LLC was formed in 2022 under the same ownership and key management team to focus and accelerate the development of EIT's proprietary UV measurement products. Originally established in 1977, EIT has provided engineering & contract electronic manufacturing services (EMS) for medical, industrial, analytical instrument, telecommunications and aerospace customers. EIT's UV measurement products which include radiometers and on-line measurement systems have been sold worldwide since 1986. Over 100,000 EIT products have been sold to measure LED, broadband and UV germicidal sources.

*For more information
contact EIT or:*

SPOTCURE SAL-B1005 Rev 01.00 January 2023

ILT800 CureRight

The One Meter That Does It All.....



Is the energy level high enough?
Are the lamps intense enough?
Is the system in need of maintenance?

Complete, and easy to understand analysis of your UV process

Filtration options

The ILT800 spectral filtration was designed to match the photoinitiators' response to UV light which is directly related to its absorption and is very wavelength selective. Most lamps emit broadband UV/IVS/IR, and the lamps output may not change evenly over all wavelengths. The ILT800 filters were designed to monitor changes in output in the areas that effect the absorption, and in turn the effectiveness of the curing. Whether you're using a low output fluorescent source for sterilization, high intensity mercury or xenon lamps for curing, or narrow band LED's for photolithography, there is a version of the ILT800 optimized for your needs.

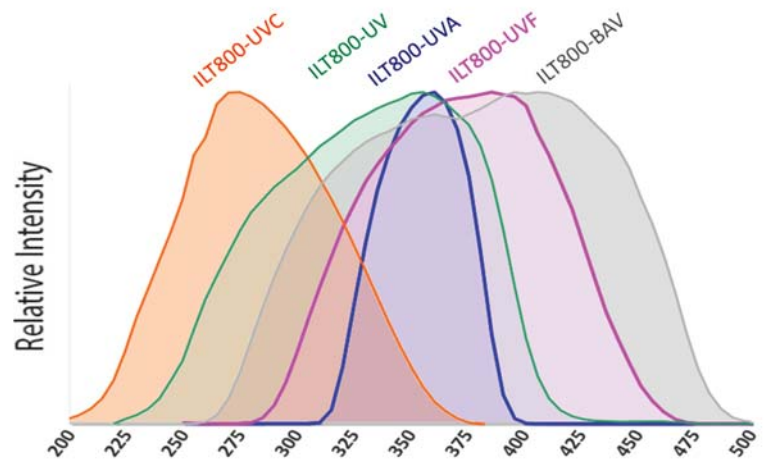
The response curves for each filtration option are shown below. Custom designs are also available.



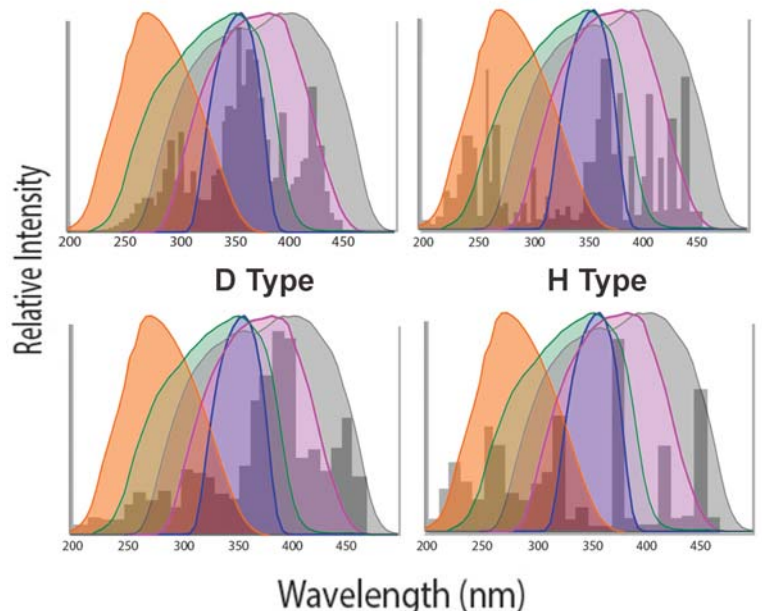
The **ILT800** CureRight radiometers measure everything you need and includes ISO17025 accredited calibration to ensure accuracy. The ILT800 simplifies measurement by continuously sampling until UV light is detected, then automatically measuring. The device's large OLED display provides both numerical and graphical representations of the irradiance and dosage. Sampling occurs at 3000 readings per second, allowing belt speeds of up to 77 meters per second, providing a high-resolution profile for both continuous and pulsed light sources

Feature-rich radiometer that responds to your needs

Feature	Benefit
Up to 3,000 samples per second	Measure Pulsed or steady state
Stores 20 unique device IDs	Like having multiple meters in one
Profiling	Generates hi-resolution graph
Optic and controls on one side	Same orientation for all processes
Auto/Manual/Live modes	Flexible for multiple applications
Stores up to 1,000 profiles	Track multiple systems over years
Large OLED display	Easy visualization of your data
ISO17025 Calibration	Ensured accuracy



Lamp spectrum versus ILT800 sensitivity curve:
Iron Doped Classic UV



Wavelength (nm)

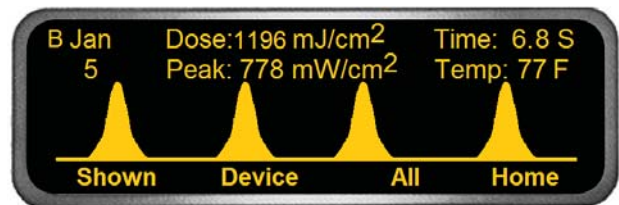
Measure Spot, Area, Flood, Belt & Oven Lamps & LED Sources without confusion, without a computer, without a doubt

It is important to control not only the dose of the UV light that the products receive, but also the irradiance level, to ensure proper curing throughout the entire coating or layer. In order to verify that the proper irradiance is maintained along the entire exposure path, a profiling radiometer is required. The ILT800 is a self-contained, powerful yet easy-to-use meter that captures, displays and stores all your data, across all your UV/VIS processes. The ILT800's rapid measurement speed provides a high-resolution profile of your system. System abnormalities and process failures can be pinpointed easily, and proper maintenance and adjustments can be made quickly, allowing you to get up and running faster.



Compare the current conditions to an established base line

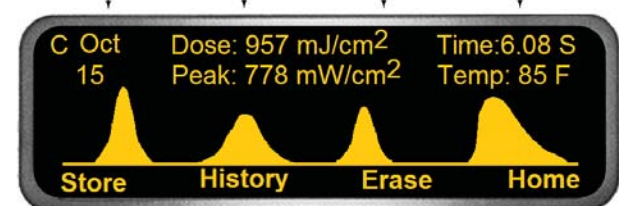
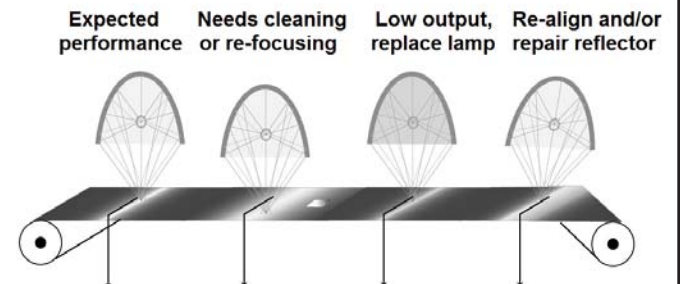
The image to the right shows the irradiance levels of the lamps in a properly aligned, 4 lamp system. All of the lamps have the same intensity and their profiles are the same. This information can be saved in storage as a baseline and recalled at any time for comparison with updated readings from the process.



BASE LINE

Pinpoint problems and their causes precisely

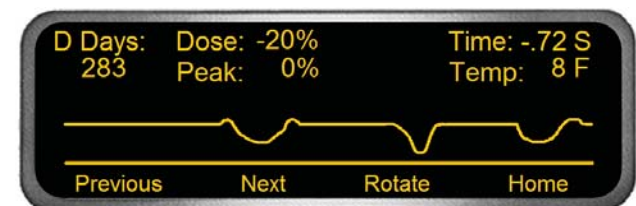
Over time lamps and reflectors degrade. Merely noting a reduction in intensity does not indicate the source of the degradation. As shown in this example, the ILT800 allows you to easily see how the changes in the shapes of the profiles relate to the actual changes in illumination, and are indicative of the major causes for degradation.



CURRENT

Determine the magnitude of the problem instantly

The third image shows the percent difference in intensities between the lamps presently versus when the baseline was taken. From this you can determine if the lamps are performing within the optimum process window. The value in the upper left indicates how much time has passed between the baseline measurement and the current sample. In this example it was 283 days.



DIFFERENCE

Specifications

All Models

Range	4.5 decade (5 mW/cm ² to 40 W/cm ²)
Readout	mW/cm ² , mJ/cm ² , J/cm ² & profile/graph, Date, Time, Temp
Sensors	Linear, Solid State, GaAsp, & SiC
Dimensions	102 x 152 x 12.7 mm (L/W/H)
Display	19 x 77 mm OLED
Power	Micro USB & Rechargeable Battery
Temp	0 - 75 degrees C (internal case temp)
Input Optic	Cosine corrected difuser
Memory	400,000 data points

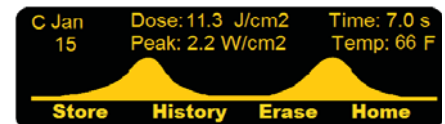
Model	Spectral Range (nm)
ILT800-UVA	315 - 390
ILT-BAV	275 - 475
ILT800-UV	250 - 400
ILT800-CUV	215 - 350
ILT800-UVF	360 - 400 Flat (275 - 450)
Custom Filtration	Contact Us

Ensure the Cure

The ILT800 comes with an extensive software suite including the CureRight internal meter software, CureRight PC software for programming and data extraction, and ILT's Datalight III with full API for custom programming.

The CureRight PC software allows customers to download all saved readings to a PC. It also enables programming of the ILT800 with up to 20 device ID's (light source model or nick name), program the date and time, minimum light level, allowable delay between readings, auto shut off time and more.

The meter's internal software facilitates measuring, storing, viewing and comparing over 1000 saved measurements including profile, date/time, temperature, irradiance, and dose.

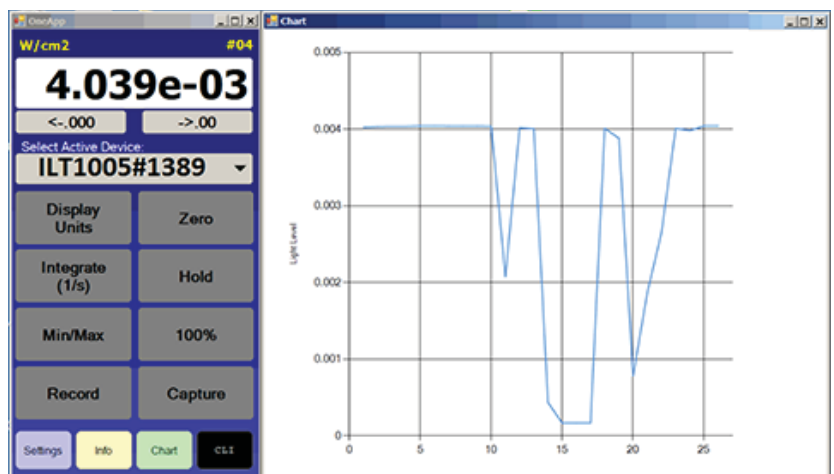


The ILT800 flexibility also extends to include compatibility with ILT's Datalight III Meter application. Our Datalight III Meter App allows users to connect multiple devices on one PC and simultaneously, monitor, track, and record results of up to 100 units. The Datalight III PC software includes a comprehensive API allowing customer to write their own code and communicate directly with the ILT800's.



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TECHNOLOGIES

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CureRight Quick Start Software Manual for ILT800 & ILT850

SW 1.1.3.0

FW 1.1.0.8



InternationalLight
TECHNOLOGIES

10 Technology Drive
Peabody, MA 01960
Tel: 978-818-6180
www.intl-lighttech.com

Thank you for purchasing a CureRight series light meter from International Light Technologies.

Installation

Click on the ILT Datalight CureRight Software suite windows installer package

The file Datalight CureRight.exe will install with no further prompts and the application icon will be placed on the desk top.

Set Up:

Turn on your meter. Press Button 1

Place meter in Data Ready Mode. Press 4 options, then 3 info, You are now in Data Ready Mode.

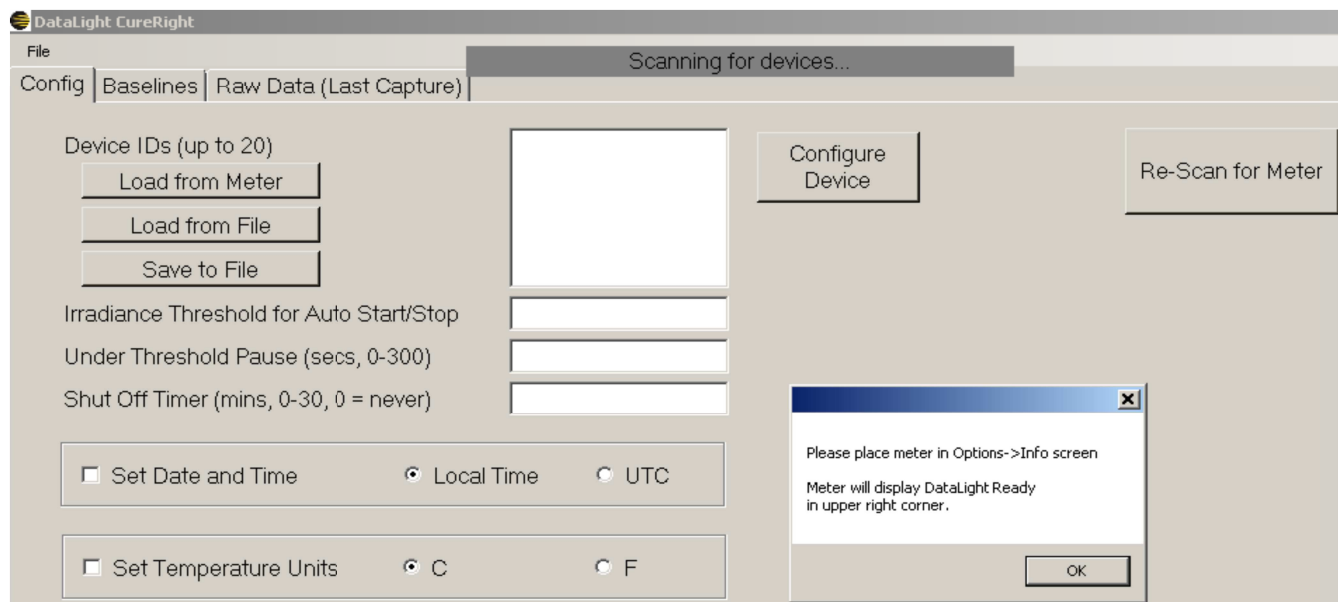
Plug in One Meter. use the supplied USB micro cable or a good quality USB Micro cable.

Note: CureRight can only access 1 meter at a time.

(Warning, Oversized, or low quality USB cables and/ or using excessive force to plug in a USB cable can cause damage to the USB port)

Initiate the software. Click on the DataLight CureRight Applications icon on the desk top.

The opening screen appears as follows:



(note you can perform these steps in any order, If you initiate software first, when see a no devices connected error message, simply plug in the meter, turn it on, place in Data Ready Mode and then “Re-Scan for Meter” in the software.)

The Config Tab

Device ID's (up to 20): Results are read from the meter and display the previously programmed Device ID's. →

Load from File will load the list that was previously saved with the **Save to File** option noted below.

Save to File stores the current values shown in the box

Note: Save/Load to file facilitates the programming of multiple ILT800 units, 1 at a time.

Create ID: Type each ID name in the square white box and hit return to enter a new line until all ID's are entered. Once complete hit configure device.

UVA Flood
Spot Cure 365
LED 385 nm

The screenshot shows the 'Config' tab interface with the following elements:

- Navigation tabs: Config | Baselines | Raw Data (Last Capture)
- Device IDs (up to 20): A text box containing 'test', 'UVA', 'SPOT', and '365'. Below it are buttons for 'Load from Meter', 'Load from File', and 'Save to File'.
- Buttons: 'Configure Device' and 'Re-Scan for Meter'.
- Irradiance Threshold for Auto Start/Stop: Input field with value '5.000e-03'.
- Under Threshold Pause (secs, 0-300): Input field with value '2'.
- Shut Off Timer (mins, 0-30, 0 = never): Input field with value '5'.
- Time Settings: Set Date and Time, Local Time, UTC.
- Temperature Units: Set Temperature Units, C, F.

Programming features in the config tab:

- **Irradiance Threshold for Auto Start/Stop:** Enter Value in scientific notation.
- **Under Threshold Pause** time: Enter allowable time in seconds.
- **Shut Off Timer:** Enter time in minute, 0 (never) or between
- **Set Date and Time:**
 - Use the same time as the computer running the CureRight software.
 - The time can be set as either Local time or UTC/GMT
- **Set Temperature Units**

Configure: loads the ILT800/ILT850 meter with the parameters entered.

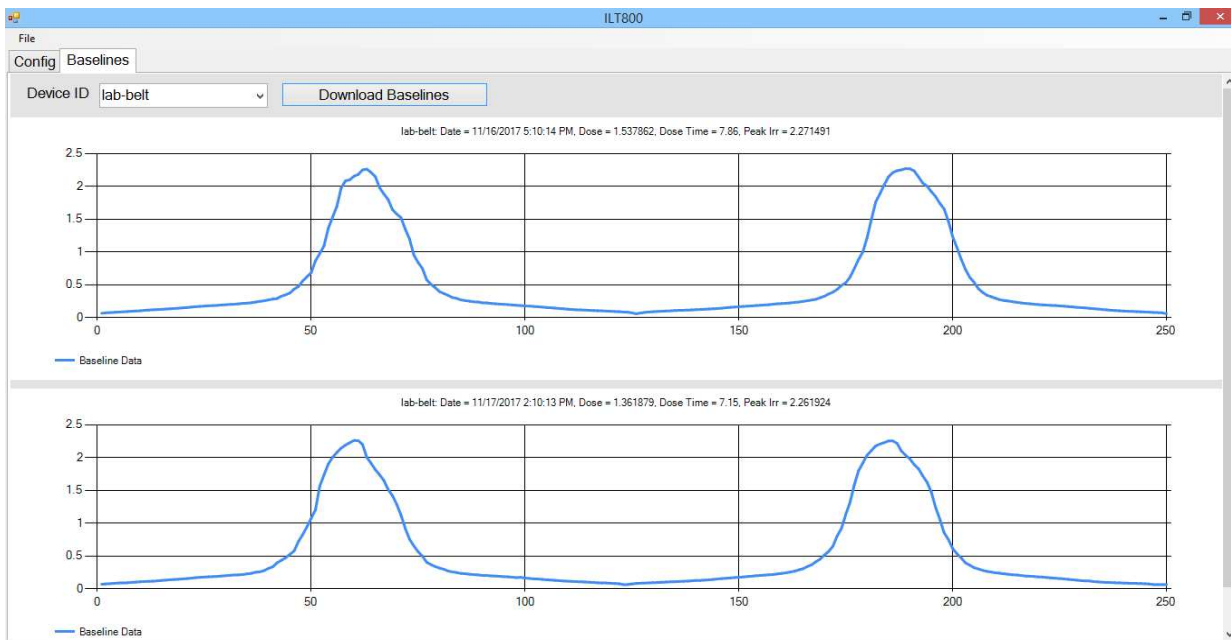
Re-Scan for Meter: Used if there are communication issues or to recognize the next meter for programming multiple systems. **Note that only one meter should be connected to the computer at a time.**

The Baseline Tab

The Baselines tab will download all the baselines (saved readings) for the selected Device ID. Use the drop down box next to Device ID to make your selection.

Click on Download Baselines to initiate downloading of all readings saved under the selected device ID.

Right-clicking any graph gives the option of copying the graph to the clipboard, saving the graph data to a CSV file, or saving all the data from the current download to a CSV file.



The Raw Data (Last Capture) tab

Config | Baselines | Raw Data (Last Capture)

1	2	3	4	Integrate Between Points
Click within this box to configure meter for Raw Data capture.	A. Return meter to Home screen and perform test. B. If the meter was disconnected from the PC to run test, reconnect meter and select Re-Scan for Meter from the Config tab. C. Return to this tab for Step 3.	Click within this box to download and graph data (Meter will return to Options->Info screen).	Right-Click chart to copy or download to CSV.	Point #1: 2.39,0.0495 Point #2: 3.38,0.0489 Integral: 0.0506

The ILT800 graphical display compresses the results into 250 data points to allow the data to fit onto the display. The raw data tab is used when greater detail/resolution is required. Raw Data Last capture cannot be applied to previously taken measurements. It only works for the most current/last captured measurement taken within the application.

Before you begin, set up the meter using the meter buttons:

The measurement mode must be set to Manual or Auto
(press home, options, mode, auto or manual)

The meter must be set to DataLight Ready mode
(press options, then info)

Activating the test within the Raw Data software

Press button 1 to initiate 1. (Click within this box to configure meter for Raw Data capture)

2. Follow advise in button 2 for taking a measurement using the meters menu buttons.

Press home (4) on the meter to return to the main screen

Take a measurement with the meter

In Manual Mode Press start (3), expose to light, Press stop (3)

In Auto Mode 3xpose to light and complete a measurement

After completion of the measurement, **press Raw data capture button 3** (click this box to download and graph data, the Cureright app will automatically return the meter to Datalight ready mode)

Below box 3 will indicate the file is downloading, then after a short period the graph will appear in the Raw Data capture window.

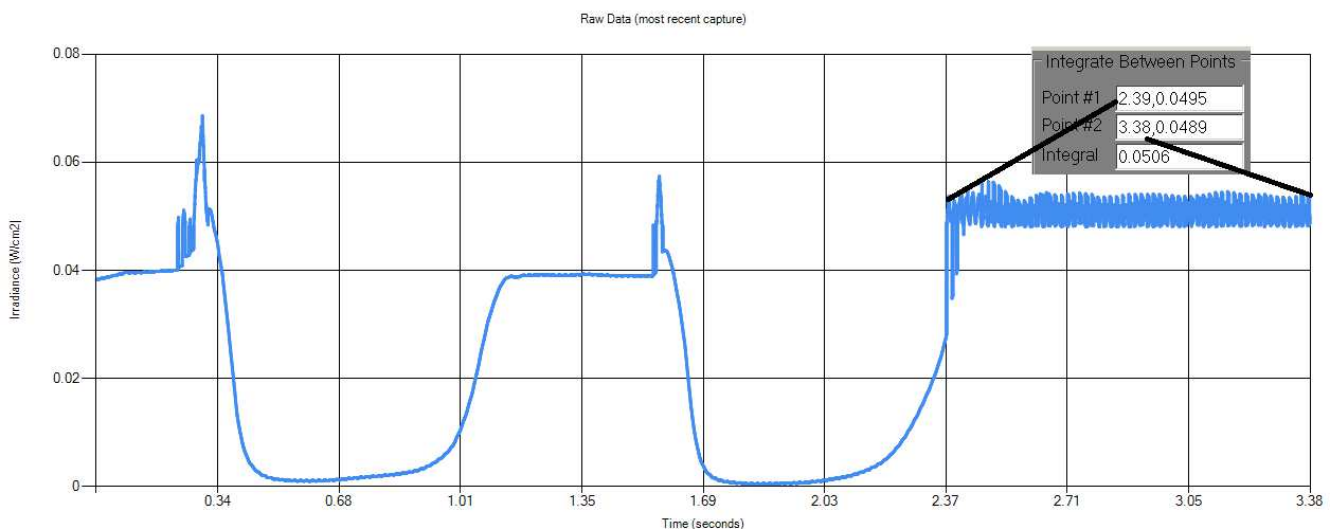
To save the file follow advise in box 4

COPY: Right click on the graph, then click copy to clipboard. Then paste import into another file

SAVE Right click on the graph, then click save to .csv , type in your file name and press save

Integral between points

This feature allows the user to select a starting and ending point and calculates the dosage/exposure for the selected time period.



Additional Software testing options.

Note: The Meter App. In ILT's DataLight III software package can also be used to capture data live to your PC like our ILT2400 handheld ILT5000 Research and ILT1000 datalogging radiometers.

Datalight III can be downloaded from the ILT website in the **documents and downloads** tab on the ILT2400 Radiometers Pages (as well as the ILT5000 and ILT1000 pages)

<https://www.intl-lighttech.com/products/ilt2400-hand-held-light-meter>

ILT800 CureRight Instruction Manual



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TECHNOLOGIES

10 Technology Drive

Peabody, MA 01960

Tel: 978-818-6180

www.intl-lighttech.com

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1. Equipment Overview:

The ILT800 CureRight Series is designed to measure all types of UV curing methods and sources including conveyor, belt, oven, flood, area, spot, 3D printer, pulsed, traditional UV lamps, and UV/VIS LED's and LED Light sources.

ILT800 meter purchase includes 1 meter with removable display shield, 1 USB cable, ISO 17025 accredited NIST traceable standard single point calibration, and a hard case for shipping/storage.

The ILT800 comes in many filtration versions:

ILT800-UVA 315-390 nm

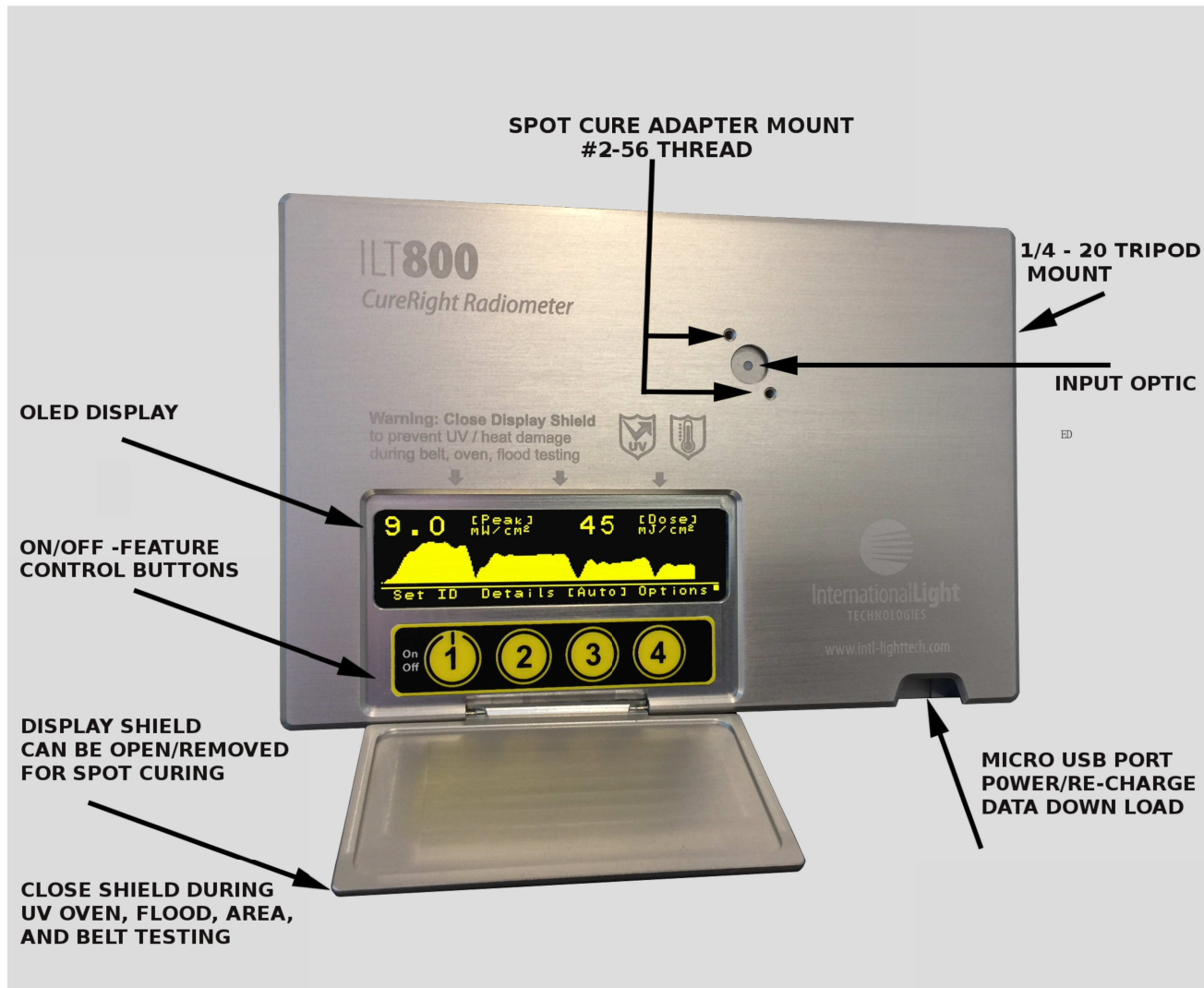
ILT800-BAV 275-475 nm

ILT800-UV 250-400 nm

ILT800-UVF 275-450 nm, 360-400 nm flat

ILT800-CUV 215-350 nm

The ILT800 measures 6 inches long, x 4 inches wide x .5 inches thick.



(Note: the ILT800 accepts two #2-56 screws for mounting spot cure adapters. Adapters allow the user to assure an accurate/repeatable working distance is used each time. Small changes in alignment and distance can cause significant changes in results when measuring spot cure sources and LED's.)

While in Auto mode the display will state “**Integrating**” while measuring. When the light level has decreased below the programmed **minimum** light level threshold, there will be a 2 second **delay** and then the display will automatically update showing the Peak, Dose and a Graph of the light output over time. (Note the **delay** time and **minimum** light level threshold are a **programmable** with connection to a PC. See advise on programming features using DataLight CureRight in section 13)

To Save the results of the most recent measurement, press Button 2 Details, then Button 1 Store. After saving the file the meter resets to the home screen.



To take a **new measurement**, expose the meter to light and it will automatically begin a new measurement as soon as the minimum light level requirement is met. Again the display will say “Integrating” and will update the display upon completion. (the previous graph will show on the display until the present measurement is complete.)

3. Power Requirements

- USB Micro, USB 2.0 or 3.0
- Power Note: The ILT800 is a sensitive light monitoring device. Noisy USB power circuits can introduce unwanted current in the sensitive measurement circuit which may cause the unit to count or incorporate the noise into the displayed results.

4. Power Up / Power Down

The unit is powered up under the following scenarios:

- Button 1 is pressed. Note there will be a brief delay before the screen lights up.
- The unit is plugged into an active/powering USB cable.

The unit is powered down under the following scenarios:

- Button 1 is held down for more than 1 second.
- The battery voltage falls below 3.5V.
- The unit is idle (no Button presses), while not charging, for 5 minutes (or the user programmed time period)

Powering down the device will automatically save the following data:

- The active Device ID (Programmed source ID in use)
- The measurement mode, i.e. Auto, Manual, or Live

5. Standard Usage

The unit is ready for use immediately after it is turned on.

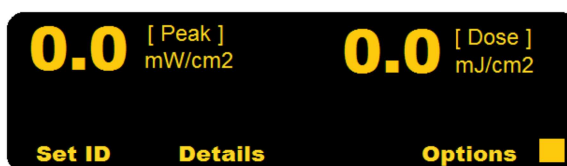
In **Auto mode**, the unit will automatically start **“Integrating”**, tracking the dose and peak irradiance, once a pre-defined minimum light level is established. Once the light level returns below the pre-defined minimum for 2 seconds, the unit will automatically stop integrating followed by displaying the dosage, peak, and irradiance profile. (Note: Minimum light levels and time delays are programmed using the DataLight CureRight app. See advise on programming using DataLight CureRight in section 13.)

In **Manual mode**, the unit will start and stop based on the **Start/Stop** Button. When stopped, the unit will display the dosage, peak, and irradiance profile.

In **Live mode**, the unit is always sampling irradiance and updating the dose/integral. The dose/integral can be reset with the **“Zero”** option.

Within both Auto and Manual mode, the unit will display **“Saturation”** in the middle of the irradiance profile if light level exceeds the maximum measurable peak irradiance at any time.

Home Screen Auto



Manual



Live



In Manual and Auto modes, the Home Screen will display 0.0 for Peak and Dose values when turned on. These values and the profile will be updated once a measurement is taken.

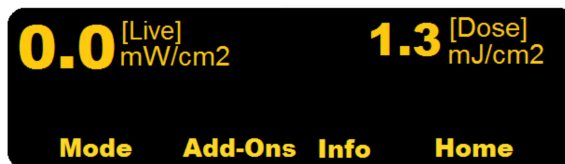
The options available from this screen are as follows:

Button 1	Set ID	Presents the Set ID screen and menu
Button 2	Details	Presents the Details screen and menu
Button 3	[Empty] Start/Stop	When in Auto mode, Button 3 is not used When in Manual mode, this option starts and stops the

	Zero	sampling When in Live mode, this option zeroes the integral/dose reading
Button 4	Options	Presents the Options menu

6. Option Menu [Home Screen]

The Options Menu, displayed with the Home Screen, presents the following capabilities:

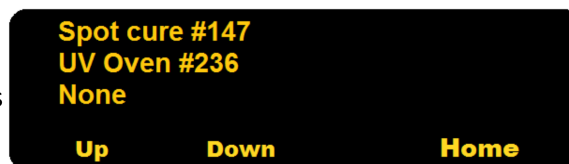


The options available from this screen are as follows:

Button 1	Mode	Allows setting of the Sampling Start mode to either Auto (triggered by light level) or Manual (start and stop with a Button press)
Button 2	Add-Ons	Presents the Add-Ons menu (not currently supported)
Button 3	Info	Present configuration information about the meter along with an option to capture “Live” data for informational or system setup debugging
Button 4	Home	Return to the Home screen

7. Set ID Screen

This screen allows *selection* of the active Device ID. This ID will be associated with all saved data going forward. The list of available ID’s are set as described in *Setting the Device ID’s* below.



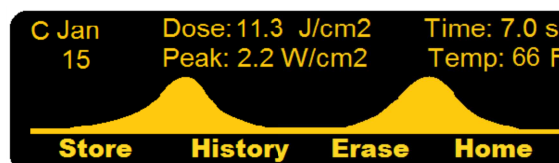
The options available from this screen are as follows:

Button 1	Up	Move the Device ID selection cursor up
Button 2	Down	Move the Device ID selection cursor down
Button 3		Not in use
Button 4	Home	Return to the Home screen

Note: ID’s are programmed using the DataLight CureRight app. See advise on programming ID’s using DataLight CureRight in section 13.

8. Details Screen

This screen shows additional details about the last data sample while also presenting further options related to data management on the meter. The highlighted “C” at the upper left of the screen indicates that this is the Current sample, the most recent set of data captured.

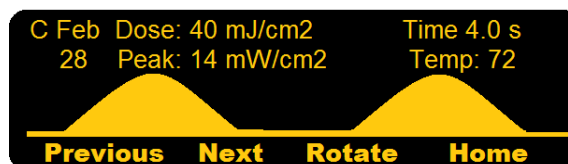


The options available from this screen are as follows:

Button 1	Store	Stores the baseline (up to 1000 baselines can be stored), including the chart data, detail data, and Device ID
Button 2	History	Presents the History screen and menu
Button 3	Erase	Presents the Erase menu
Button 4	Home	Return to the Home screen

9. History Screen

This screen shows historical profiles and data, allowing insight into trends over time. This view also provides an option to view the difference between the currently captured data and any previously saved data.



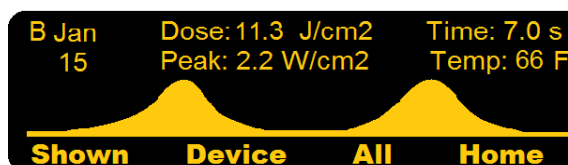
Note that all profiles are associated with the User Selected “Device ID” when Device ID is in use. To learn more about Device ID see sections 7 for Set ID and chapter 13 for programming Device ID.

The options available from this screen are as follows:

Button 1	Previous	Locates and displays the sample, for the device selected within the Set ID screen, from the previous memory location. See the Note in the Erase Menu section below
Button 2	Next	Locates and displays the sample, for the device selected within the Set ID screen, from the next memory location. See the Note in the Erase Menu section below
Button 3	Rotate	Rotates the display among “C” Current profile, “B” the saved Baseline, and “D” the Delta between the Current profile and saved Baseline
Button 4	Home	Return to the Home screen

10. Erase Menu [History Screen]

This menu provides options to erase previously stored sample data from internal flash memory.



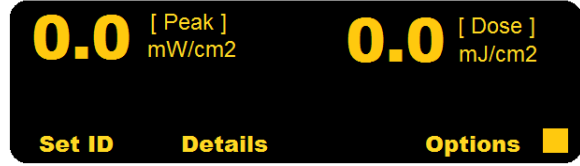
The options available from this menu are as follows:

Button 1	Shown	Erase the sample currently shown
Button 2	Device	Erase all samples associated with the device selected within the Set ID screen
Button 3	All	Erases all samples, for all devices
Button 4	Home	Return to the Home screen

Note: Memory location typically reflects chronological order, i.e. a the previous memory location contains the sample previously saved in time. If individual “Shown” baselines are erased, as opposed to “Device” or “All”, a previous memory location can represent a later point in time.

11. Battery Status

The battery charging system is designed to provide 2 hours of operation between charges for new batteries. The auto-off feature and the ultra-low battery drain while the unit is off together provide for extended periods of time between charges.



There are two charge status as indicated by a square in the bottom right corner of the display:

Charging	Solid square
Low Bat	Square blinks every 2 seconds

12. Hard Reset

Hard Reset If the meter becomes unresponsive, The unit can be reset, from any state or screen, but holding Button 1 for 15 seconds.



13. DataLight CureRight Application Installation

The DataLight CureRight application must be downloaded from the ILT800 Documents and downloads page on the ILT website: link <https://www.intl-lighttech.com>

The file Datalight CureRight.exe will install with no further prompts and the Application icon will be placed on the desk top.

13A. Running DataLight CureRight Application:

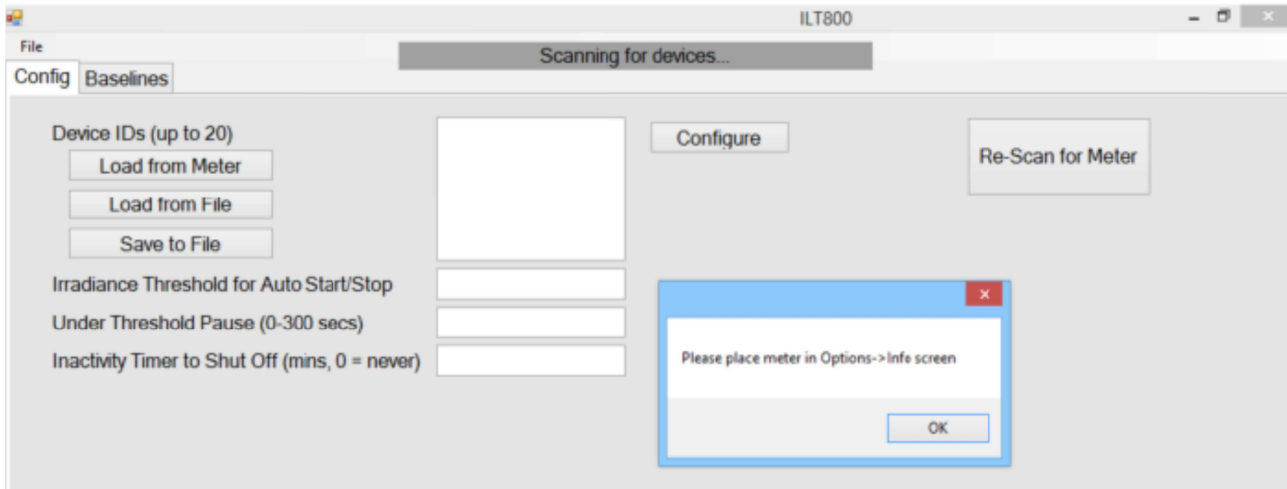
Plug in One Meter using a good quality USB mini cable (One is provided with each purchase). Note: DataLight CureRight does not support simultaneous programming of multiple units. Be sure only 1 meter/module is connected at a time.

The Application provides the following functions:

- Configuration of the ILT meter and modules Irradiance Threshold
- Configure allowable delay (travel time, lamp to lamp while below threshold)
- Configure Auto off (set , activate, de-activate)
- Setting Device ID's

Click on the DataLight CureRight Applications icon on the desk top.

The opening screen appears as follows:



Retrieval of the baseline history (saved with Details -> Store above) that the Meter needs to enter the “DataLight Ready” mode by selecting **Options and then info.**



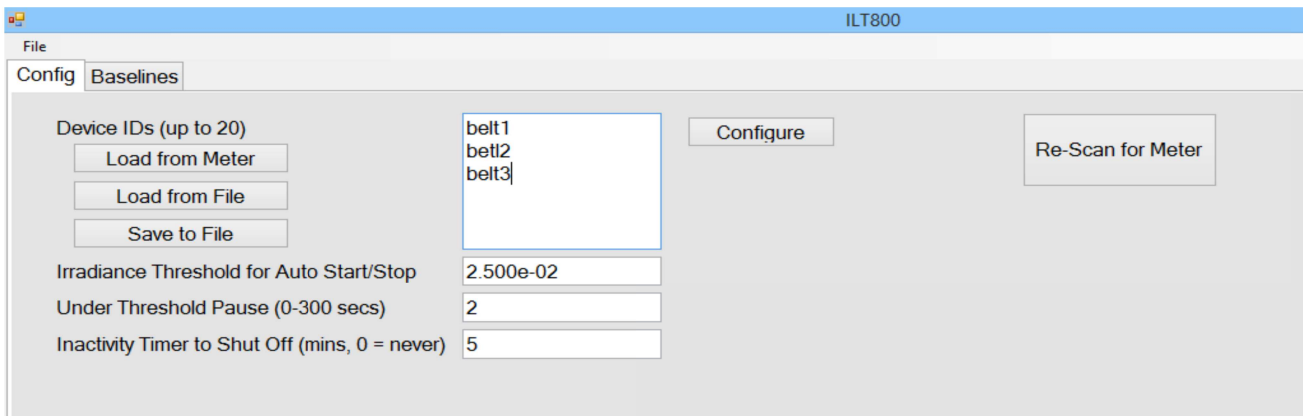
DataLight Ready halts all internal meter activity to allow the application to interact with the meter. After selecting Options->Info on the meter and selecting “OK” in the application, the app will load the connected meters settings and stored baselines.

13B. The Config tab

Config allows setting and retrieving the Device ID’s on the meter(Device ID can be the light source type, make, model serial number etc.).

The “Load from Meter” option will load the previously set Device ID’s from the meter.
 The “Load from File” option will load the list that was previously saved with the “Save to File” option.
 This Save/Load to file facilitates the programming of multiple ILT800 units.
 The Config tab also allows the setting of the following meter parameters:

- Irradiance Threshold for Auto Start/Stop, i.e. when using the Auto Mode
- The Threshold Pause time (seconds)
- The Inactivity Time to shut off the meter (minutes)

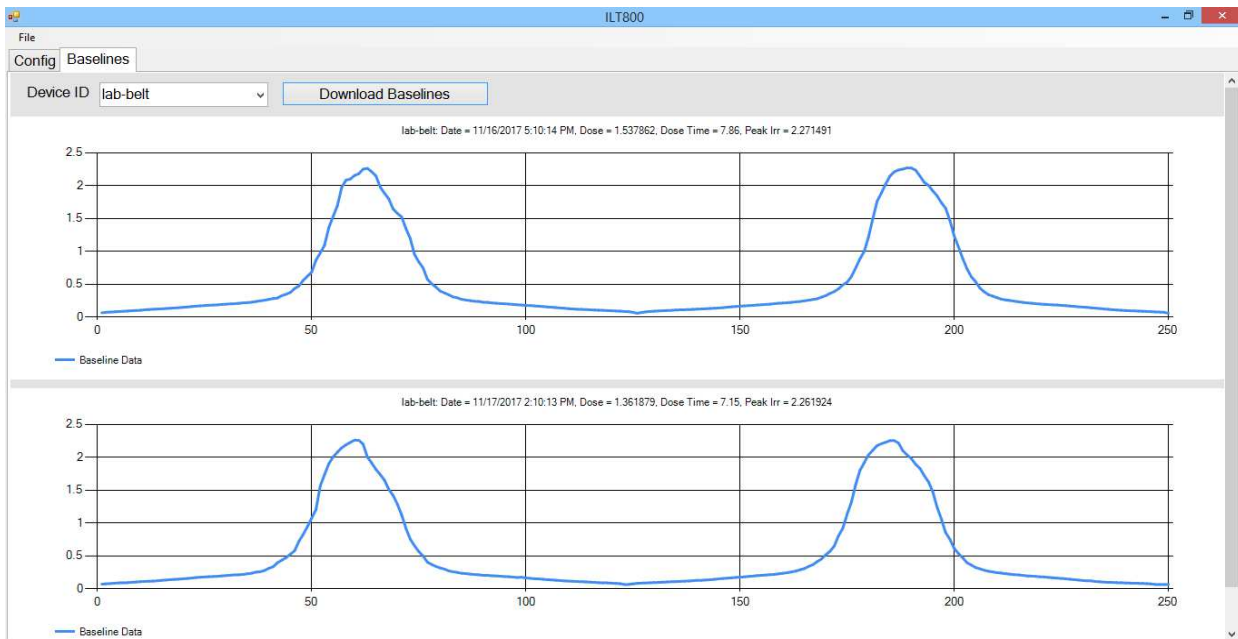


The “Configure” Button will load the meter with the parameters entered.

The “Re-Scan for Meter” is used if there are communication issues with a meter or, more commonly, to recognize the next meter for programming. Note that only one meter should be connected to the computer at a time.

13C. The Baseline Tab

The Baselines tab will download all the baselines for the selected Device ID. Right-clicking any graph gives the option of copying the graph to the clipboard, saving the graph data to a CSV file, or saving all the data, from all the graphs, to a CSV file.



14. Care and Handling

The ILT800 internal board is a sensitive electronic device. Due to risk of board damage, only trained personnel should attempt opening the housing on the ILT800. Opening the ILT800 by non-ILT personnel voids all warranties and may adversely affect the calibration of the meter.

Operating Temperature: The Housing of the ILT800 was designed to reflect UV in order to reduce the risk of over heating the **internal components** which are rated for up to 75 Deg C. The ILT800 can withstand temperatures as high as 350 Deg C for a short duration. Before insertion into high temperatures, the ILT800 housing should be cool to the touch. Repeated exposure to high temperatures, without cooling, can cause overheating of the internal components. **The shield must be closed rto protect the display and button board from overheating and UV damage.**

Humidity: 0-95% non-condensing.

ESD: Use basic ESD precautions and practices when handling the device. It is advisable to discharge any static buildup by touching a grounded conductive surface before making contact with devices or its connectors.

Cleaning: No chemicals or liquid solution should be used to clean the ILT800 housing. The housing is made of durable anodized aluminum, however, the housing does not provide a sealed barrier to protect the internal components from moisture/liquids. The input optic has a clear quartz window to allow cleaning. The center of the window has an aperture that must be kept clean. Any dirt, debris, build up, cracks, scratches or discoloration on the center of the window will cause deviation in the readings. Glass cleaning wipes or a cu-tip and very small amount of glass cleaner, or alcohol can be used to gently clean the window. (care must be take to assure no liquid enters the sides of the input optic)

Submersion/Overspray: The housing is not rated for submersion or high levels of moisture. Should over spray inadvertently be applied to the housing, it should cleaned and polished.

Calibration: ILT typically recommends an annual calibration for all equipment. Per ISO17025, the customer may, through their own QC process, create their own calibration cycle. Please contact ILT if a different calibration cycle is required.

(Due to the risk of UV degradation, customers measuring intense UV sources (near or above W/cm²) or requiring frequent (daily/hourly...) measurements of sources with UVC / UVB may require a shorter calibration cycles to prevent out of tolerance, as found conditions)

Service: Before returning any equipment to ILT for service (including warranty evaluations)

Please visit the ILT website and obtain an RMA before shipping products for service:

<http://www.intl-lighttech.com/services/return-material-authorization/rma-form>

15. Warranty

The equipment you have purchased from International Light, Inc. has been expertly designed and was carefully tested and inspected before being shipped. If properly operated in accordance with the instructions furnished, it will provide you with excellent service. The equipment is warranted for a period of twelve (12) months from date of purchase to be free of defects in material or workmanship. This warranty does not apply to damage resulting from improper set up, accident, alteration, abuse, loss of parts or repair by other than International Light Technologies. The equipment will be repaired or replaced, at our option, without charge to the owner for parts or labor incurred in such repair. This warranty shall not apply unless the equipment is returned for our examination with all transportation charges prepaid to International Light Technologies, 10 Technology Drive, Peabody, MA 01960. International Light Technologies has no other obligation or liability in connection with said equipment.

IS₃₁₀ UV Logger



UV Logger Specifications:

System components	UV Logger with rechargeable battery and USB cable		
Dimension	86 x 54 x 6mm (approx. 3.4 x 2.1 x 0.24 inch)		
Sampling Rate	1000 readings/sec.		
User Interface	Four (4) push buttons to allow users to display Total Energy, Peak UV Irradiance, Percentage Degradation Value and Selection of Lines and Lamps		
Selectable Detection Range (Power) and resolution	Detection Range	Resolution	
		UV Logger Display	Data Analysis Software
	0.002 to 0.4 W/cm ²	0.01	0.001 to 0.002
	0.004 to 0.8 W/cm ²	0.01	0.003 to 0.004
	0.007 to 1.7 W/cm ²	0.01	0.006 to 0.007
	0.014 to 3.0 W/cm ² (default)	0.01 to 0.02	0.013 to 0.014
Detectable Energy Range	0.001 to 99.0 J/cm ²		

MEASURE ALL UV LAMPS **IN ONE GO!**

You only need **1 UV LOGGER** to measure
up to 9 lamps in several oven lines.



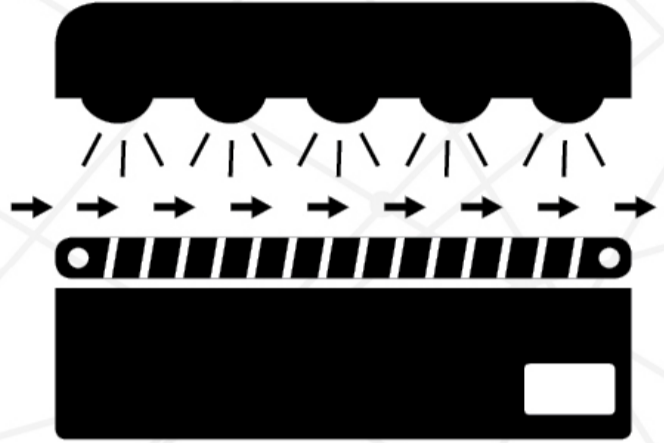
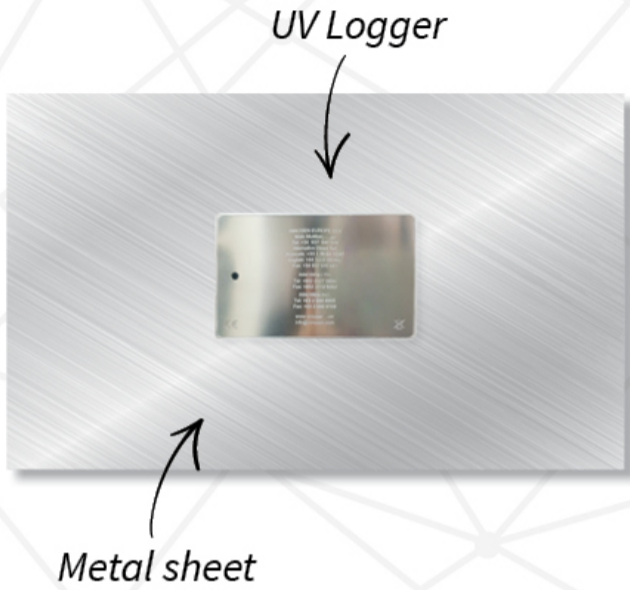
=



The Logger will record them all and show
individual readings through the
Free Data Analysis Software.

AS EASY AS 123

HERE'S HOW TO DETERMINE THE PERFORMANCE OF UV LAMP AND OVEN FOR A CONSISTENT AND REPEATABLE CURING PROCESS:



1. MEASURE

Attach the magnetic IS310 UV Logger face down to the metal sheet that goes into the oven to measure the overall energy in the oven as well as the performance of each individual lamp.



2. GET DATA

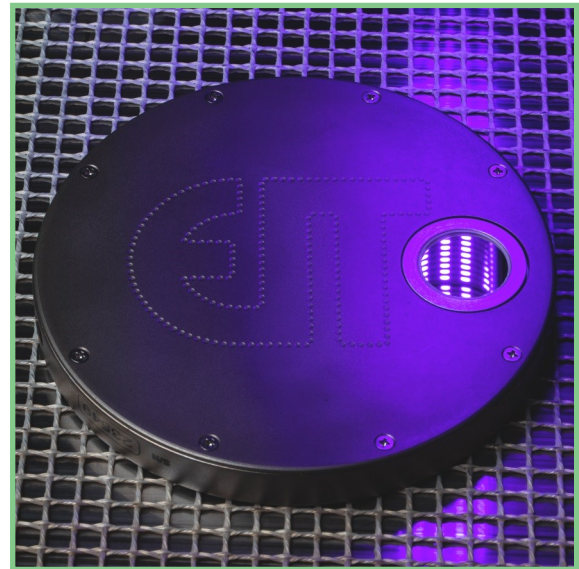
This small device can record data for up to 9 individual lamps in a maximum of 9 different ovens. You can easily download the data to a PC and see the data presented as graphs on our free software that comes with the logger.



3. MAKE ADJUSTMENTS

From increasing the current, replacing or repositioning the lamp and/or the reflector, and cleaning or changing the reflector, you are now better informed and empowered to do so. This is literally information at your fingertips!

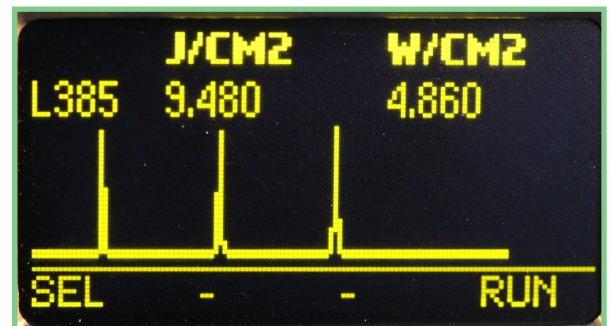
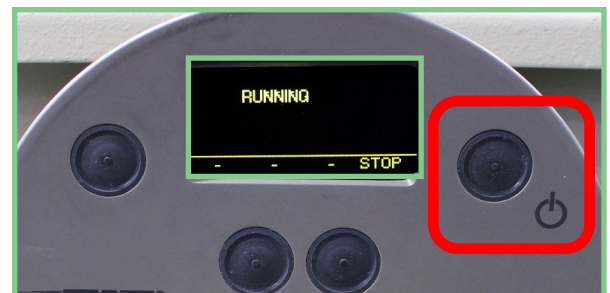
LEDCure Radiometer



EIT's LEDCURE® family of instruments are highly portable and accurate radiometers designed specifically to measure the UV generated by industrial UV LED systems. The instruments take measurements in the same environment as the work pieces undergoing UV curing or treatment and provide irradiance (W/cm^2), energy density (J/cm^2) as well as an irradiance profile. The LEDCURE is easy to use, compact and affordable. With its patented Total Measured Optic Response (TMOR™) the LEDCURE provides absolute energy measurements with accuracy and repeatability comparable to larger, cabled, metrology-based instruments that are much more expensive.

LEDCURE® STANDARD VERSION FEATURES

- **Easy to Use:** Single push button operation to turn the unit on, collect & view the data (irradiance & energy density) and irradiance profile
- **Single EIT LED (L)- Band:** Specified at the time of order (L-365, L-385, L-395 or L-405)
- **Full Specification Operating Range:** 200 mW/cm^2 - 40 W/cm^2 , 0-250 J/cm^2
- **User Selectable Sample (Smooth) Modes:** Adjustable between 25/128/2048 equivalent samples/second
- **User Selectable Screens:** Graph, Reference or Setup Screens
- **User Replaceable Batteries:** Two alkaline AAA cells



Top: Easy to Use; with Single Push button operation

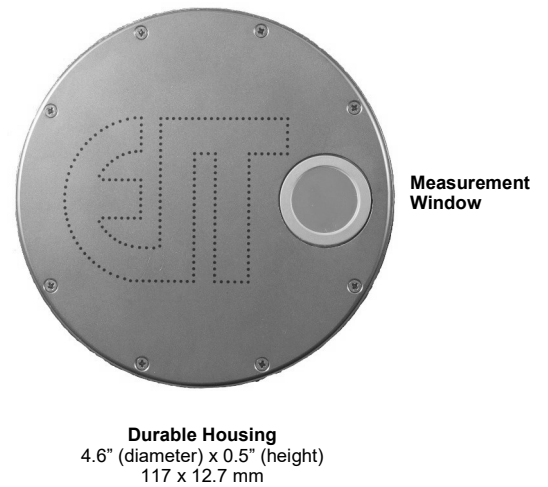
Bottom: Graph View showing data collected on three LEDs

LEDCURE[®] PRODUCT FEATURES

LEDCURE Display Side



LEDCURE Measurement Side

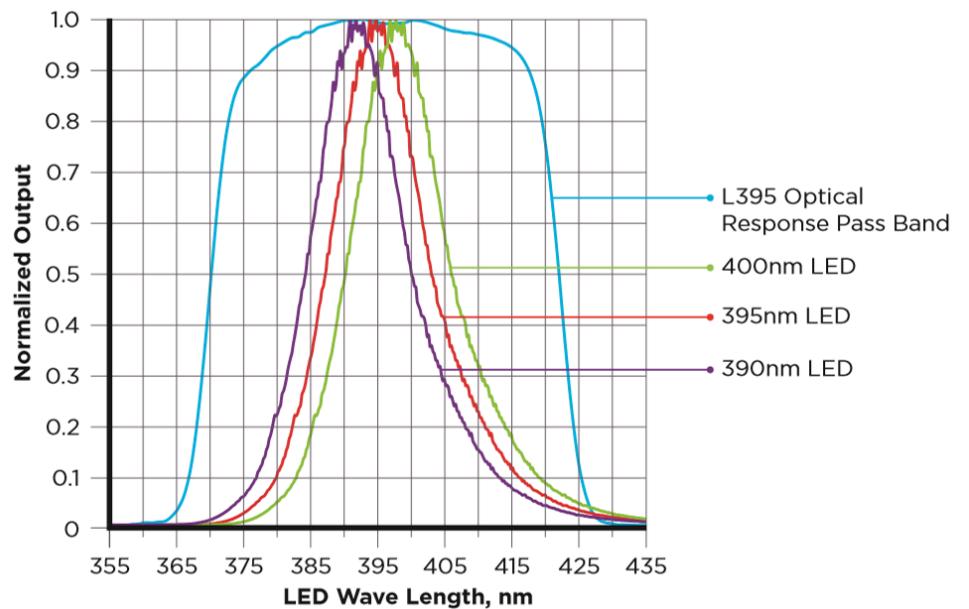


EIT TOTAL MEASURED OPTICAL RESPONSE (TMOR™)

Patented¹ optics in the EIT LEDCURE are designed specifically to support UV LED Measurements. Each L-Band response is nearly flat over the range of its optic response. ALL optical components in the instrument are included in each LEDCURE L-Band response. The LEDCURE with this patented Total Measured Optical Response (TMOR™) is the only portable radiometer that measures absolute LED energy without requiring extraordinary calibration methods. The TMOR in the LEDCURE provides:

- Highly accurate readings run-to-run
- Highly repeatable results and unit-to-unit matching
- Absolute energy measurement allows easy unit-to-unit and source-to-source comparisons

The Total Measured Optical Response (TMOR) for each of EIT's L-Bands is nearly rectangular (blue line). Each EIT L-Band response (L-365, L-385, L-395, L-405) covers a wavelength range that accurately captures all of the energy emitted by that type of LED source. This optical response is the characteristic that provides each LEDCURE with excellent performance including measuring of absolute energy, and outstanding resolution, matching and repeatability.



The Total Measured Optical Response (TMOR) for the EIT L-395 band shown above accurately captures all of the energy wavelengths emitted by a nominal 395 nm \pm 5 nm LED (purple, red, green). The same is true for the response of all EIT L-Bands.

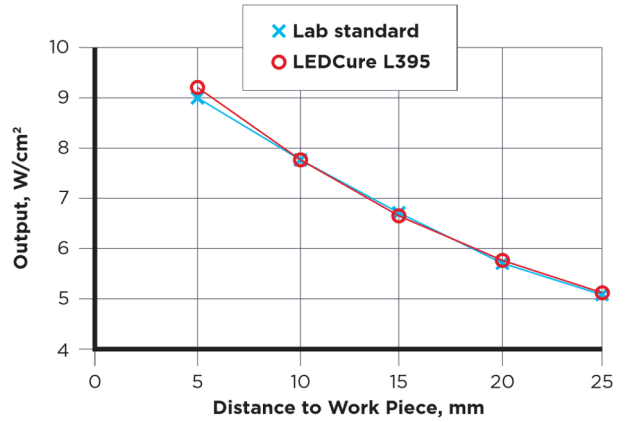
¹ May, J.T. and Lawrence, M., inventors "Radiometry Instruments and Technology" U.S. Patent 9,778,103 issued 10/3/2017

LEDCURE® PERFORMANCE: ACCURACY

ACCURACY: A 395 nm, 10 Watt LED source was set up so that the source output power could be measured by an L395 LEDCURE and the results compared to those obtained from a Laboratory standard with integrating sphere.

LEDCURE performance² is indistinguishable from the larger, less convenient, and more expensive Laboratory standard which cannot be used in a typical UV curing environment.

The source intensity was varied by changing the working distance between the source and measurement point. The graphic results are nearly coincident. A detailed examination of the numerical data demonstrated an average difference between Laboratory standard and the L395 LEDCURE of 0.1% with a maximum difference of 2.4%.



Comparison of LEDCURE values to Lab standard at different working distances

LEDCURE® PERFORMANCE: RESOLUTION, MATCHING & REPEATABILITY

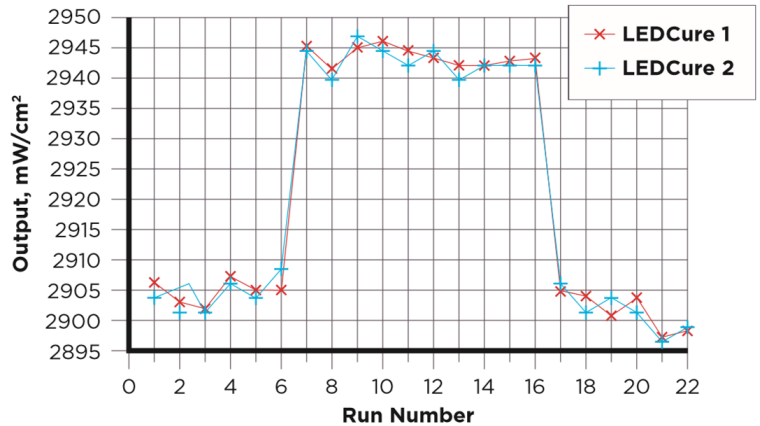
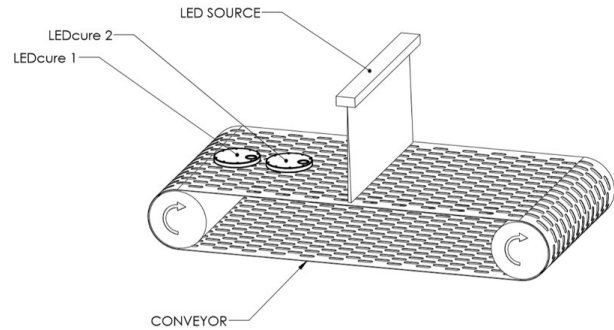
Two production LEDCURE radiometers were passed under an LED source, one behind the other on a conveyorized system as shown to the right. Analysis of the data demonstrates:

RESOLUTION: LEDCURE resolution for a 40 W unit is 3 mW (0.0075%)

MATCHING: Readings from the two LEDCURE radiometers compared show that the units matched to within ± 0.021% of standard deviation

REPEATABILITY: The measurements in mW/cm², were recorded and plotted for each radiometer in each of 22 runs through the system.³ The red and blue lines represent the absolute irradiance (mW/cm²) from two different LEDCURE instruments

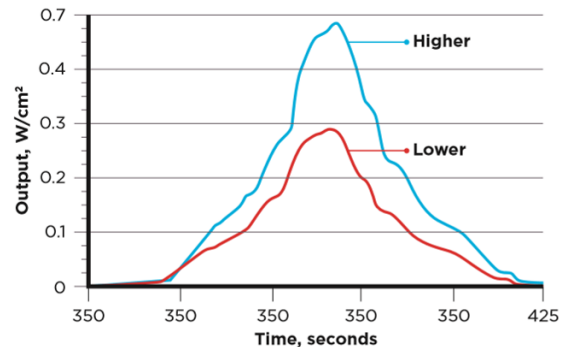
The two curves track each other closely. The LEDCURE is able to track small output changes in the LED run-to-run. Repeatability is typically better than ± 0.2%



LEDCURE® PROFILER VERSIONS

Single and Four Band Profiler Versions of the LEDCURE are also available that operate in the same manner as the Standard LEDCURE. Profiler versions allow the transfer of the numerical data (irradiance, energy density) values and the irradiance profile (Watts as a function of time) to EIT's UV PowerView Software® III Program. This allows the user to:

- Analyze changes over time
- Look at individual arrays
- Compare multi-array systems
- Trouble shoot lines
- View array height changes



Changes in LED Lamp Intensity with Power Setting Changes

2: Testing performed by Excelitas-Lumen Dynamics Group

3: Testing performed by EIT LLC

LEDCURE[®] PRODUCT SPECIFICATIONS-STANDARD VERSION

Spectral Responses	L365: 340-392 nm: +/- 2 nm (FWHM, 52 nm); 4 OD Blocking L385: 360-412 nm: +/- 2 nm (FWHM, 52 nm); 4 OD Blocking L395: 370-422 nm: +/- 2 nm (FWHM, 52 nm); 4 OD Blocking L405: 380-432 nm: +/- 2 nm (FWHM, 52 nm); 4 OD Blocking	
Operating Range	200 mW/cm ² -40 W/cm ² and 0-250 J/cm ²	100-200 mW/cm ² and 0-50 J/cm ²
Accuracy	Typically, ± 2% or better; ± 10% of reading plus ± 0.2% of full scale	Typically, ± 5% or better; ± 10% of reading plus ± 0.1% of full scale. Note: These specifications are based on static (shuttered) exposure systems
Resolution	3 mW/cm ²	
Spatial Response	Approximately Lambertian (cosine)	
Repeatability	Typically better than 0.2% (unit alone); ≤ 1% max	
Calibration	Supplied with NIST traceable calibration certificate	
Smooth Modes	Smooth ON: Effective Sample rate of 25 equivalent samples/second Smooth PROFILER: Effective Sample rate of 128 equivalent samples/second* Smooth OFF: Effective Sample rate of 2048 equivalent samples/second *Recommended sample rate for most applications	
Display	Easy to Read, Yellow Text on Black Background	
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods Audible alarm indicates when temperature has exceeded tolerance	
Battery/Battery Life	Two user-replaceable AAA Alkaline Cells/Approximately 20 hours with the display "on"	
Time-Out Period	2 minutes DISPLAY mode (no key activity)	
Dimensions Materials Weight	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H) Aluminum, stainless steel 10.1 ounces (289 grams)	
Carrying Case	Material: Cut polyurethane interior, scuff resistant nylon exterior cover Size: 10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D) Weight: 9 ounces (260 grams)	

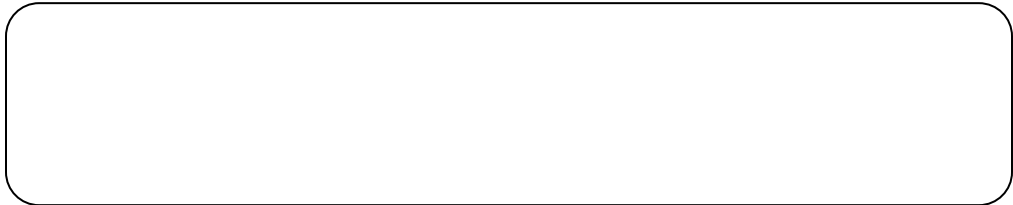


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**For more information
contact EIT or:**



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LEDCure SAL-B1007 Rev 01.00 January 2023

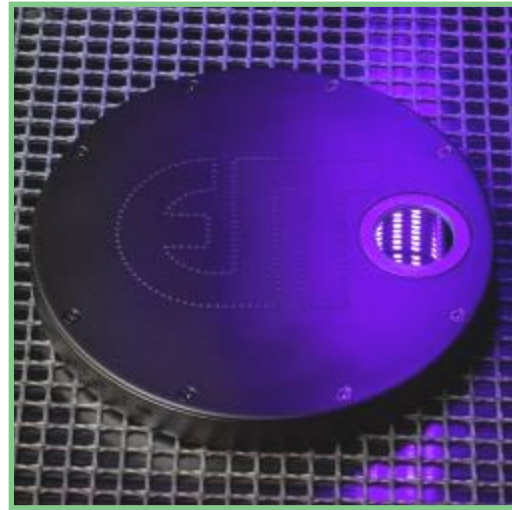
UV@EIT20.COM · WWW.EIT20.COM

ONE INSTRUMENT: TWO OPTIONS

The LEDCURE Profiler and LEDCURE Profiler Four Band radiometers support:

- Easy-to-use single button operation for production or lab environments with all values on the display
- Profiling function for laboratory, R&D, field service and troubleshooting calls

ONE INSTRUMENT



TWO OPTIONS

DISPLAY OPTION

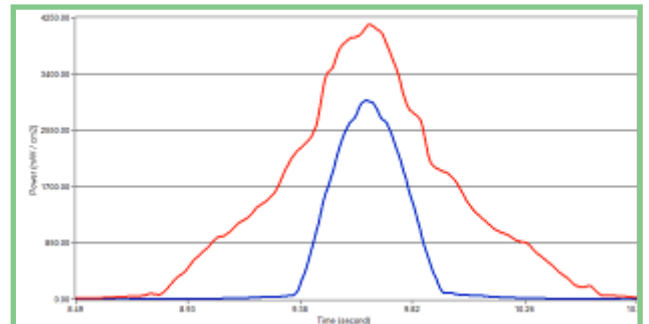
- The **Display Option** presents the data (W/cm², J/cm² & low resolution irradiance profile) on the display
- Single button operation for ease of use on a production line



Display showing irradiance & energy density values and the irradiance profile from three LED arrays

PROFILER OPTION

- The **Profiler Option** transfers the data including the irradiance profile to a computer
- EIT's UV PowerView Software® III allows for further analysis, comparison and evaluation of different variables



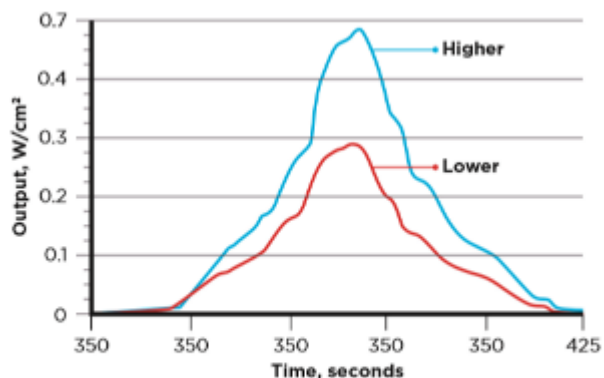
Irradiance profiles over laid on each other to analyze the differences (power, speed) between two different LED arrays

EIT LEDCURE[®] PROFILER & EIT UV POWERVIEW SOFTWARE[®] III

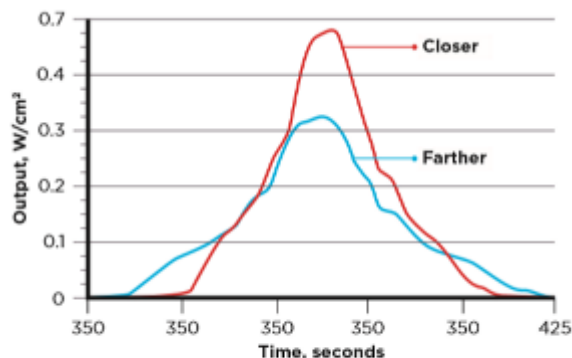
Profiler versions of the LEDCURE operate in the same manner as Standard units. The data collected can be viewed on the instrument display at user adjustable effective sample rates of 25, 128 or 2048 Hz (samples/second).

The Profiler function allows the transfer of the numerical (irradiance, energy density) values **and** the irradiance profile (Watts as a function of time) at an effective sample rate of 128 Hz (samples/second). The transferred can be analyzed with the EIT UV PowerView Software[®] III program and allows characterization of:

- Different sources, cure conditions, multiple LED arrays and readings over time, including height and power levels of the LED source, and variations in process speed and exposure time
- Performance of individual sources in multi-array systems
- Address changes and maintenance issues before they impact product quality



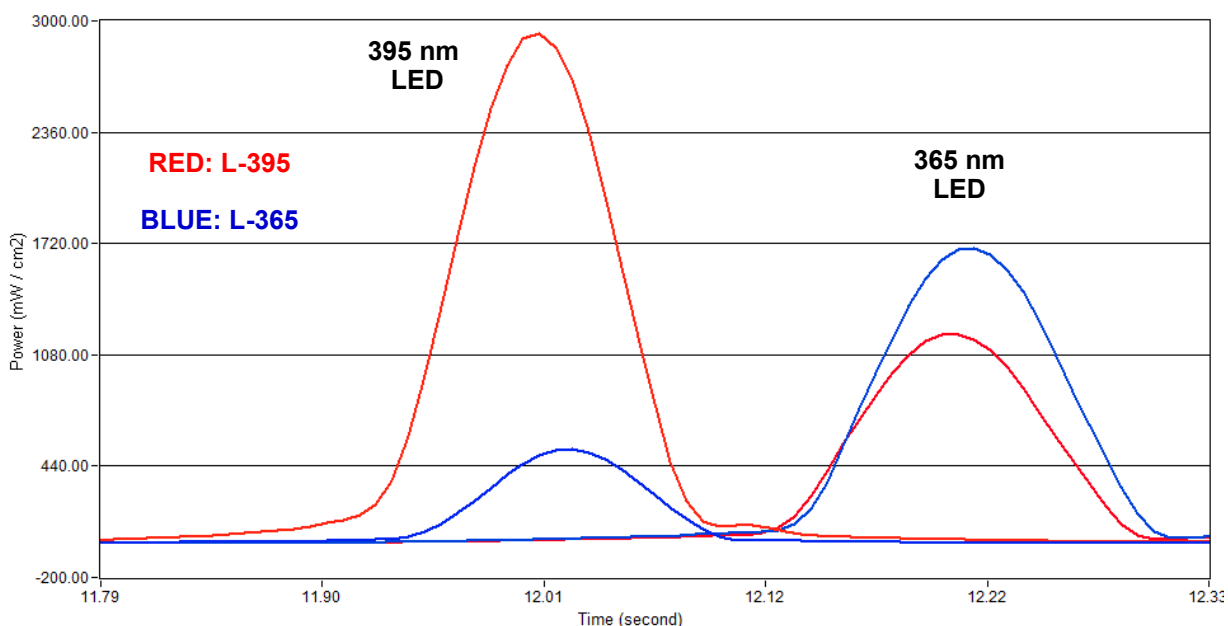
Changes in LED Lamp Intensity with Power Setting Changes



LED Lamp Intensity Changes with Distance from Lamp to Instrument

EIT UV PowerView Software[®] III

- LabView (*.tdms) file format, used with all EIT Profiling radiometers including LEDMAP, PowerMAP II, LEDCURE Profiler, LEDCURE Profiler Four Band, Power Puck II Profiler & UviCure Plus II Profiler
- USB Download, multiple right click options, enhanced notes section to add information and notes to each file
- Easily transfers screen shots, profiles and data tables into reports & programs, export data into Excel

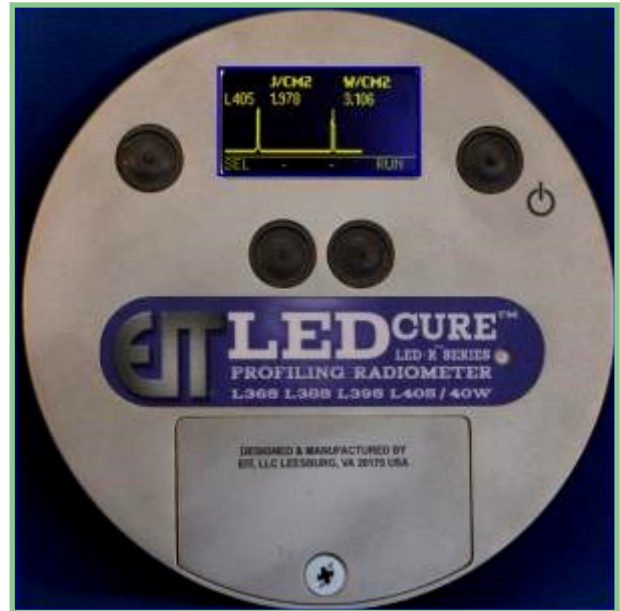


Irradiance Profiles of a 395 nm LED (left) and 365 nm LED (right) with the L-395 (Red) and L-365 (Blue) bands

EIT LEDCURE[®] PROFILER FOUR BAND

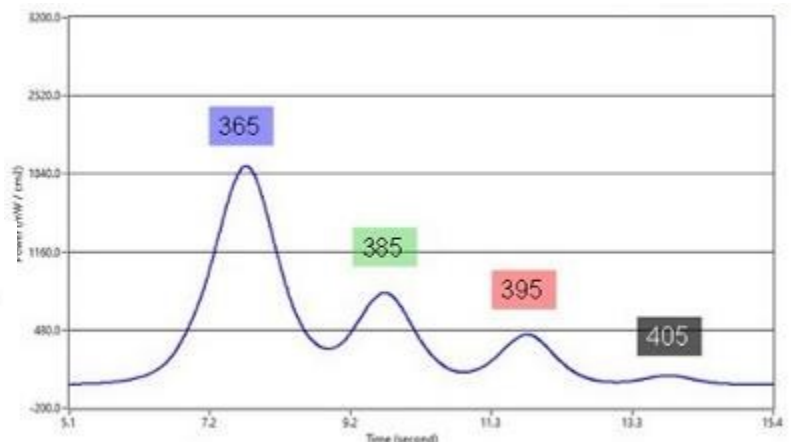
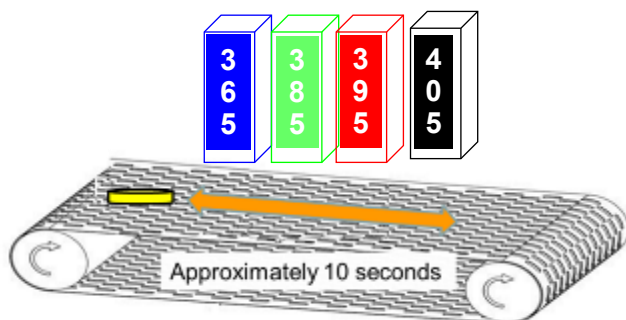
The LEDCURE Profiler Four Band:

- Was developed for LED source manufacturers, formulators, R&D labs and field service technicians who routinely encounter different wavelength LEDs (365, 385, 395 & 405 nm) and want very accurate measurements in the band of interest
- Has all four EIT L-Bands (L-365; L-385, L-395 and L-405) in one portable unit with a dynamic range of 40 W/cm²
- Features each of EIT's four L-Bands with their patented Total Measured Optical Response (TMOR[™]) for accurate, repeatable and absolute UV LED measurements
- Is easy to use with individual L-Band Irradiance (W/cm²) and Energy Density (J/cm²) values shown on the display along with low-resolution irradiance profile
- Transfers values and profiles from all four EIT L-Bands at 128 Hz to EIT's UV PowerView III Software[®] for detailed analysis



Use of the LEDCURE Profiler Four Band EIT L-Bands

- The Four Band LEDCURE allows accurate, convenient measurement of different LED types with a single instrument
- Each EIT L-Band is narrow with a Full Width Half Maximum (FWHM) response of 52 nm ± 2 nm
 - L-Band Responses: L-365: 340-392 nm; L-385: 360-412 nm; L-395: 370-422 nm; L405: 380-432 nm
- The narrow L-Band allows EIT to achieve optimal instrument performance based on:
 - Our patented¹ TMOR[™] in which includes ALL optics in the instrument response
 - Flat responsivity over the expected Center Wave Length (CWL) peak of ± 5nm for each LED type
 - Calibration of each individual L-Band to its respective LED type: L-365 band is calibrated to a 365 nm LED, etc.
- Energy from a 365 nm LED will also register in the adjacent L-Bands (385, 395) as show below
- With the LEDCURE Profiler Four Band, it is important to only count the values in the EIT L-Band that match the source type and not add L-Band values together to get the 'total LED energy'



Left: Experimental set up with four different (365, 385, 395, 405 nm) individual LED sources on a conveyor

Right: L-365 irradiance profile showing the output energy in the adjacent L-bands. For a 365 nm LED, the values from the L-365 should be the only values used.

1: May, J.T. and Lawrence, M., inventors "Radiometry Instruments and Technology" U.S. Patent 9,778, 103 issued 10/3/2017

LEDCure® Profiler Product Specifications

Spectral Responses	L365: 340-392 nm: ± 2 nm (FWHM, 52 nm); 4 OD Blocking L385: 360-412 nm: ± 2 nm (FWHM, 52 nm); 4 OD Blocking L395: 370-422 nm: ± 2 nm (FWHM, 52 nm); 4 OD Blocking L405: 380-432 nm: ± 2 nm (FWHM, 52 nm); 4 OD Blocking	
Operating Range	200 mW/cm ² -40 W/cm ² and 0-250 J/cm ²	100-200 mW/cm ² and 0-50 J/cm ²
Accuracy	Typically, ± 2% or better; ± 10% of reading plus ± 0.2% of full scale	Typically, ± 5% or better; ± 10% of reading plus ± 0.1% of full scale. Note: These specifications are based on static (shuttered) exposure systems
Resolution	3 mW/cm ²	
Spatial Response	Approximately Lambertian (cosine)	
Repeatability	Typically better than 0.2% (unit alone); ≤ 1% max	
Calibration	Supplied with NIST traceable calibration certificate	
Smooth Modes	Smooth ON: Effective Sample rate of 25 equivalent samples/second Smooth PROFILER: Effective Sample rate of 128 equivalent samples/second* Smooth OFF: Effective Sample rate of 2048 equivalent samples/second *Recommended sample rate for most applications	
Sample Rate for Profiling	LEDCure Profiler has a fixed sample rate of 128 eq. samples/sec profiling. For best matching between instrument display and PowerView Software® III values, use Smooth Profiler mode	
Memory Capacity for Profiling	LEDCure Profiler memory supports data collection for ≥ 100 minutes	
UV PowerView Software® III	National Instruments LabVIEW based programming accommodates Windows 7 and 10 collected data stored in LabVIEW based *.tdms files	
Display	Easy to Read, Yellow Text on Black Background	
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods Audible alarm indicates when temperature has exceeded tolerance	
Battery/Battery Life	Two user-replaceable AAA Alkaline Cells/Approximately 20 hours with the display "on"	
Time-Out Period	2 minutes DISPLAY mode (no key activity)	
Dimensions, Materials Weight	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H) , Aluminum, stainless steel , 10.1 ounces (289 grams)	
Carrying Case	Material: Cut polyurethane interior, scuff resistant nylon exterior cover Size: 10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D) Weight: 9 ounces (260 grams)	



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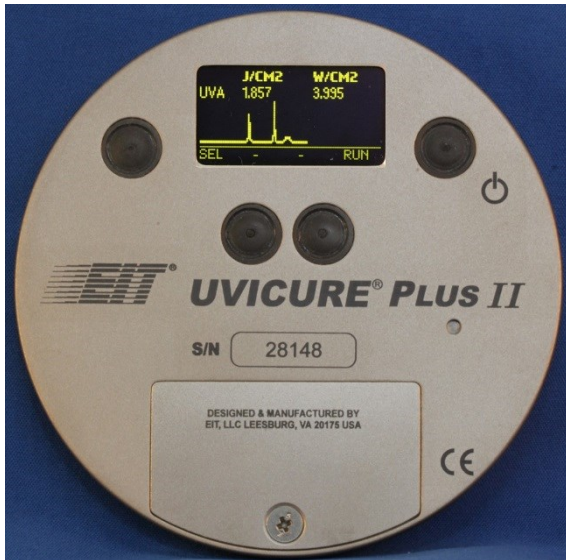


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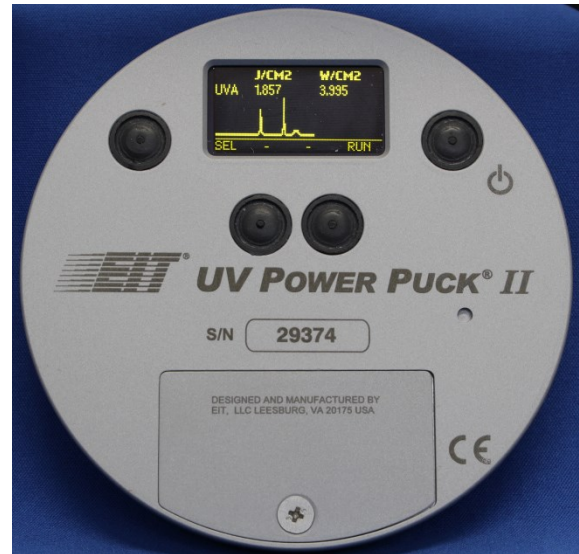
LEDCure Profiler SAL-B1008 Rev 01.00 January 2023

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Power Puck II UV Radiometer



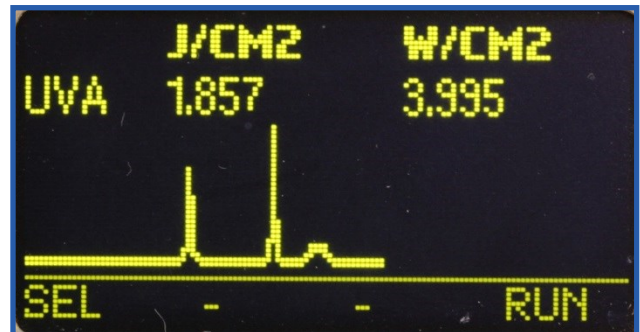
*UviCure Plus II
A single band radiometer*



*UV Power Puck II
A four band radiometer*

EIT has designed, manufactured, sold and supported industrial UV measurement solutions worldwide since 1986. The UviCure Plus II and UV Power Puck II radiometers utilize our experience and build on previous versions of our instruments. They are easy to use and help to establish, document, maintain and troubleshoot process windows in industrial UV curing applications.

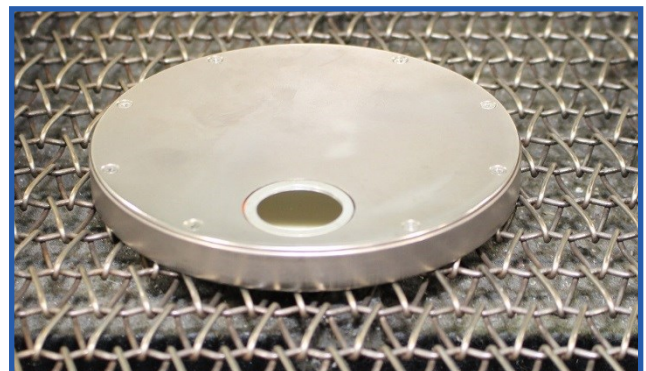
The instrument display (right) provides irradiance (W/cm^2) and energy density (J/cm^2) values as well as the irradiance profile.



The UviCure Plus II is a single band radiometer with the band specified at the time of order. EIT UVA (320-390 nm) is the most common band ordered for applications using mercury bulbs.

The UV Power Puck II is a four band radiometer with EIT UVA, UVB, UVC and UVV. Having the four EIT bands in a single instrument allows the user to identify bulb (mercury-H, mercury-iron-D, mercury-gallium-V) types.

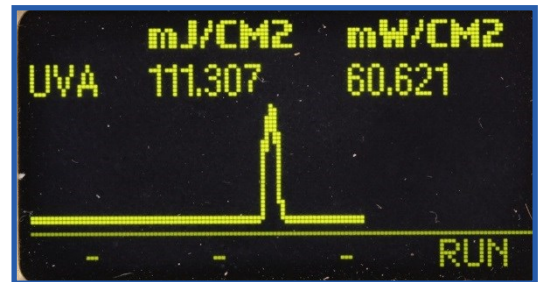
The Power Puck II allows you to independently monitor the wavelengths associated with surface cure (UVC) as well as those responsible for through cure (UVA/UVV). Tracking the ratio of UVC:UVA can indicate when your reflector is getting dirty. Looking at UVA:UVV can indicate when a mercury-gallium bulb has aged and is spectrally closer to a mercury bulb than a mercury-gallium bulb.



UviCURE[®] PLUS II & UV POWER PUCK[®] II FEATURES

The UviCure Plus II (single band) and Power Puck II (four band) radiometers are easy to use and offer a number of user selected options for the display and sampling rate.

- Easy to Use:** A Single Button allows the user to turn the unit on, collect & view the data.
- Graph:** A graph illustrating the peak UV irradiance and total energy is displayed for each UV band. The graph shows the irradiance as a function of time (W/cm^2 on Y-axis, time on X-axis) with the number of lamps and intensity of each shown.
- Reference:** Allows the user to store a run in the instrument memory to allow for easy comparison to current UV conditions.
- Toggle:** (Not Shown) Available on the UviCure Plus II. Allows the user to easily switch between Graph and Reference display screens with the push of a button.
- All Channel:** Available on the Power Puck II. All Channel displays the Joules/cm² & Watts/cm² data on one screen for all four bands (UVA, UVB, UVC & UVV).
- Setup:** Used to select instrument options including the Display Mode (Graph, Reference, Toggle, All Channel), Effective Sample Rate (Smooth), Units (J/W, mJ/mW or $\mu J/\mu W$) and Display Brightness.



UVICURE[®] PLUS II & UV POWER PUCK[®] II FEATURES

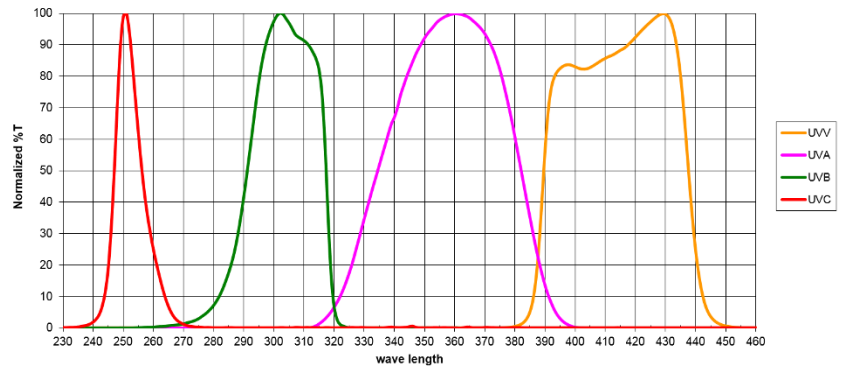
The UviCure Plus II is a single band radiometer with the EIT Band and Dynamic Range specified at the time of order. The Power Puck II is a four band radiometer with the Dynamic Range specified at the time of order.

EIT Broadband Responses

EIT's Broadband responses are optimized for mercury based sources and have the following responses:

- **UVA (320-390nm)**
- **UVB (280-320nm)**
- **UVC (250-260nm)**
- **UVV (395-445nm)**

UVA, UVB, UVC, UVV Transmission scan



EIT Dynamic (Operating) Ranges

The dynamic range of the UVICURE Plus II/Power Puck II is selected at the time of order and is based on the output of the UV source and instrument distance to the UV source.

- The Standard (H) High (10 Watt) range works well for high power curing applications
 - The (M) Mid-range (1 Watt) works well with low power arc lamps and in applications with lamps that are non- focused or away from the cure surface
 - The low range (100 mW) works well in exposure systems and applications with low power lamps
- Refer to the Product Specifications on page four for more information.

Instrument Sample Rate (Smooth) Functions

The UviCure Plus II and Power Puck II oversample at an extremely high rate. The user is able to adjust the effective sample rate used for data collection. For most applications, we recommend the **Smooth Profiler** setting.

- **Smooth On:** Effective sample rate of 25 Hz (samples per second), matches obsolete Power Puck units
- **Smooth Profiler:** Effective sample rate of 128 Hz, suggested rate for most applications. The Smooth Profiler setting reports the average (RMS) peak intensity.
- **Smooth Off:** Effective sample rate of 2048 Hz. Fast enough to detect the AC cycling in a 50/60 Hz power supply. Reports the instantaneous irradiance value which is higher than the RMS value.

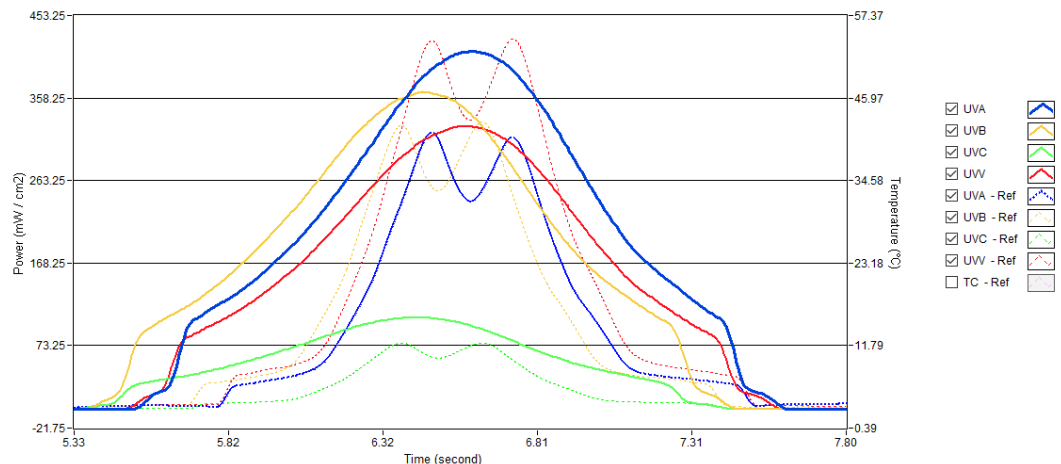
Optional Profiler Versions

Profiler versions of the UviCure Plus II/UV Power Puck II operate in the same manner as the Standard (display) versions. Profiler versions allow the transfer of the numerical data (irradiance, energy density) values **and** the irradiance profile (Watts as a function of time) to EIT's UV PowerView Software[®] III Program. Profiler units must be configured at the time of the initial order or returned to EIT for an upgrade.

This allows the user to:

- Analyze system changes over time
- Look at individual lamps
- Compare multi-lamp systems
- Trouble shoot lines
- View lamp focus
- Determine lamp type

Contact EIT to learn more about the Profiler versions



UVICURE® PLUS II & UV POWER PUCK® II FEATURES

Product Specifications (Specifications subject to change without notice)

Display	Easy to Read, Yellow Text on Black Background
Suggested Operating Ranges	Standard High Range: UVA, UVB, UVV - 100mW/cm ² to 10W/cm ² / UVC - 10mW/cm ² to 1W/cm ² Mid-Range: UVA, UVB, UVV - 10mW/cm ² to 1W/cm ² / UVC: 1mW/cm ² to 100mW/cm ² Low Power: UVA, UVB, UVV - 1mW/cm ² to 100mW/cm ² / UVC - 1mW/cm ² to 100mW/cm ² The suggested Operating Ranges are where the instrument performs best. Units will “turn on” and display data at irradiance values much lower than the suggested Operating Ranges.
Accuracy	+/- 10%; +/- 5% typical plus ±0.2% of full scale Typical +/- 5% or better
Calibration	Supplied with NIST traceable calibration certificate
Spectral Ranges (UV Power Puck® II)	Four channel monitoring of UVA (320-390 nm), UVB (280-320nm), UVC (250-260nm) and UVV (395-445nm)
Spectral Ranges (UVICURE® Plus II)	One channel monitoring of UVA (320-390 nm), UVB (280-320nm), UVC (250-260nm) or UVV (395-445nm), selected at the time of purchase
Spatial Response	Approximately cosine, “Lambertian”
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods (audible alarm indicates when temperature has exceeded tolerance)
Smooth Modes	Smooth ON: Effective Sample rate of 25 samples/second Smooth PROFILER: Effective Sample rate of 128 samples/second Smooth OFF: Effective Sample rate of 2048 samples/second
Time-Out Period	2 minutes DISPLAY mode (no key activity)
Battery/Battery Life	Two user-replaceable AAA Alkaline Cells/Approximately 20 hours with the display “on”
Dimensions	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H)
Weight	10.1 ounces (289 grams)
Instrument Materials	Aluminum, stainless steel
Carrying Case Material/Weight	Cut polyurethane interior, scuff resistant nylon exterior cover/9 ounces (260 grams)
Carrying Case Dimensions	10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D)

This equipment is in conformity with the following standards and therefore bears CE marking: IEC 61326-1:2005, EN55011: 1998, EN61000-4-2: 1995, A1: 1998, A2: 2001; EN 61000-4-3: 2002, A1: 2002, following the provisions of the applicable directives: 98/34/EEC and amendments, 89/336/EEC and amendments.



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SAL-B1001 Plus Puck Brochure Rev 01.00 January 2023

EIT 2.0™ LLC

UViCURE® PLUS II PROFILER

UV POWER PUCK® II PROFILER

One Instrument: Two Options

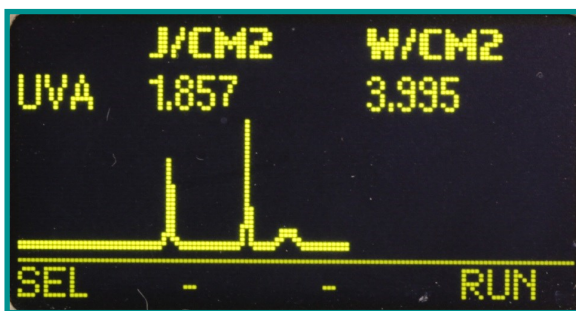
The UviCure Plus II Profiler and Power Puck II Profiler radiometers support:

- Easy-to-use single button operation for production or lab environments with all values on the display
- Profiling function for laboratory, R&D, field service and troubleshooting calls

ONE INSTRUMENT

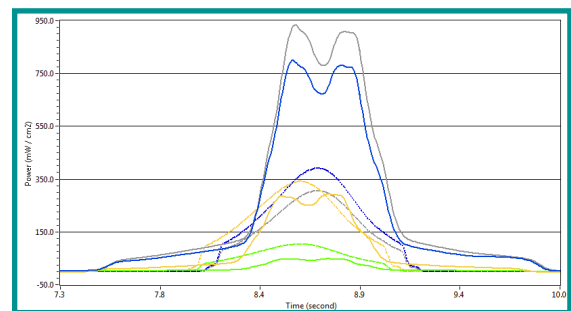


TWO OPTIONS



DISPLAY OPTION

- The **Display Option** presents the data (W/cm^2 , J/cm^2 & low resolution irradiance profile) on the display
- Single button operation for ease of use on a production line



PROFILER OPTION

- The **Profiler Option** transfers the data including the irradiance profile to a computer
- EIT's UV PowerView Software® III allows for further analysis, comparison and evaluation.

UVICURE[®] PLUS II PROFILER & UV POWER PUCK[®] II PROFILER

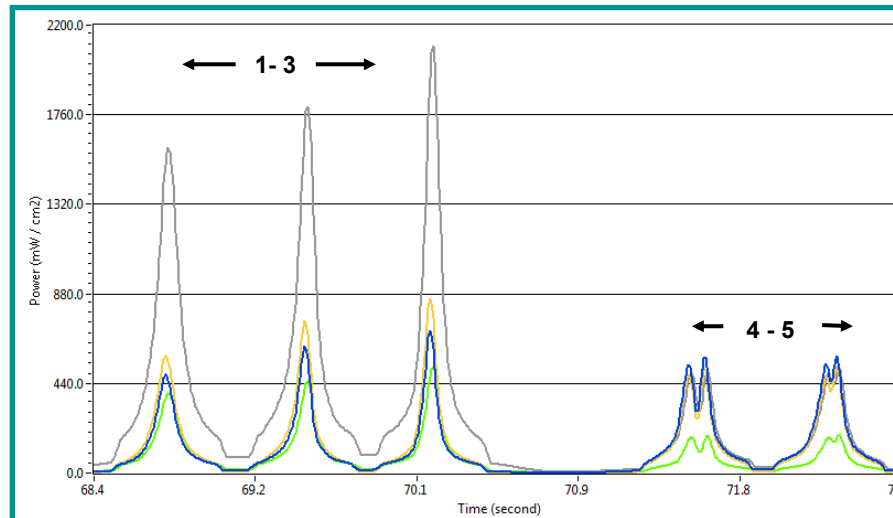
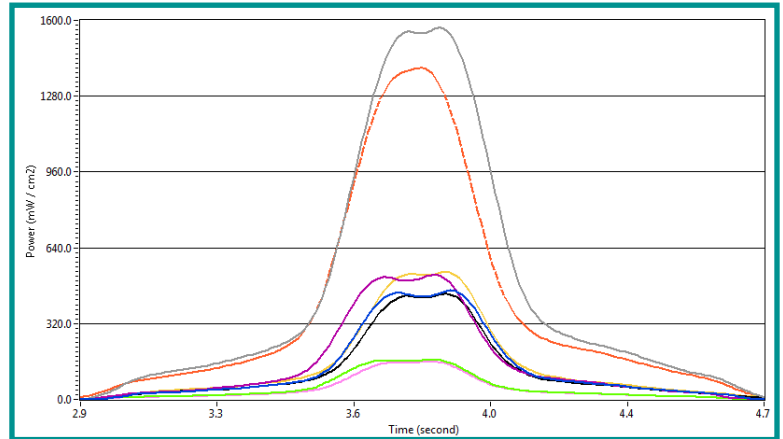
Profiler versions of the UviCure Plus II or UV Power Puck II operate in the same manner as Standard units, The Profiler function allows the transfer of the numerical (irradiance, energy density) values **and** the irradiance profile (Watts as a function of time) to a computer via a USB port for analysis with the EIT UV PowerView Software[®] III Program.

Puck Profiler Instrument Features:

- Profiler data collected at an effective sample rate of 128 Hz (samples/second)
- Display data collected at a user adjustable effective sample rate of 25, 128 or 2048 Hz (samples/second)
- Memory supports data collection of over 100 minutes

EIT Profiler units quickly and easily identify:

- The number of lamps and individual lamp performance
- Lamp focus conditions and changes to the focus
- The bulb type (Four band Power Puck II Profilers)
- Uniformity of UV across bulb length changes over time with the comparison to stored files
- Process speed and/or exposure time variations
- Maintenance needs before they impact product quality



Five Production Line UV Stations

Lamps 1-3

- Different output values
- Focused lamps
- Mercury-Gallium bulbs

Lamps 4-5

- Similar output values
- Non-focused lamps based on the "twin peaks" for each bulb
- Mercury bulbs

Data can be arranged by parameter (shown) or bandwidth

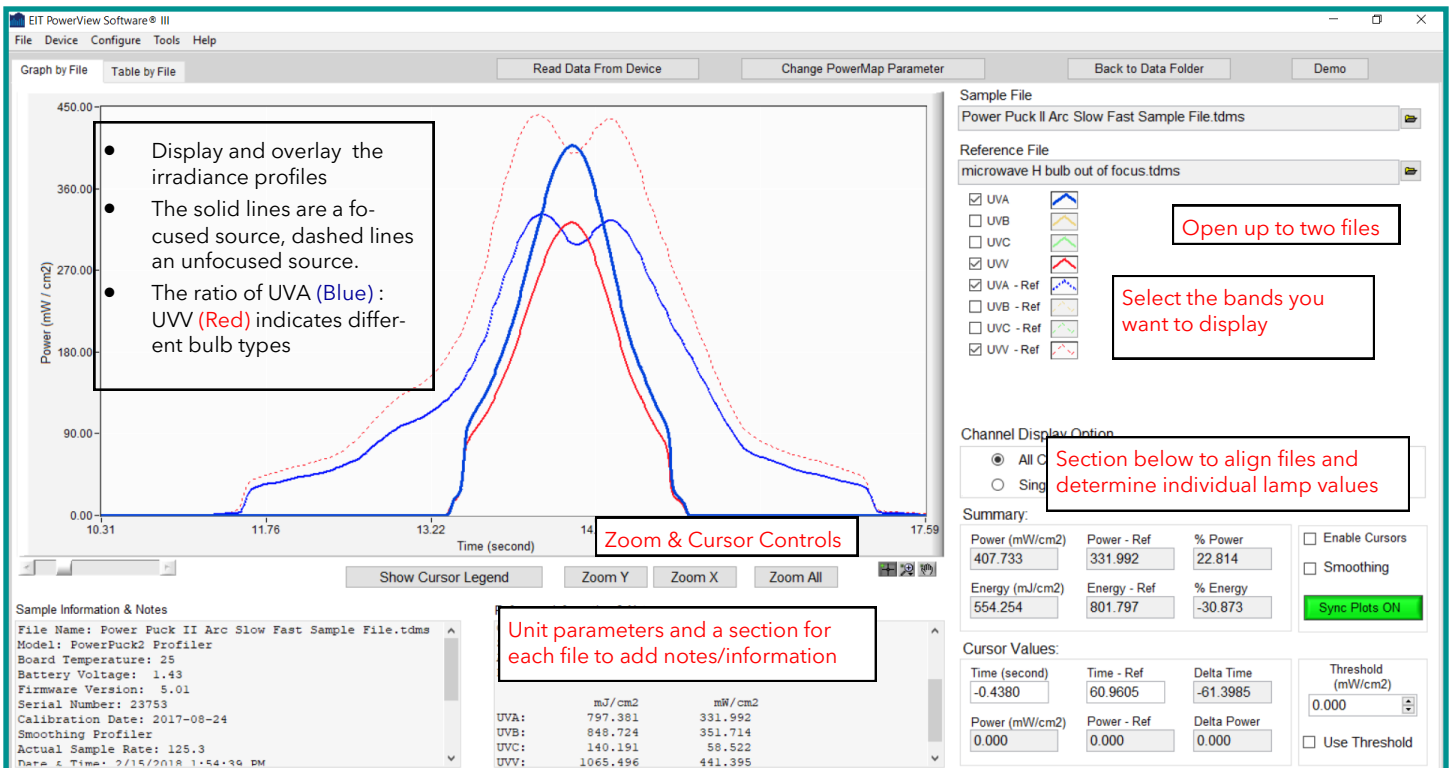
Summary By Table				
	Sample File	Reference File	Difference	%
UVA- Power (mW/cm2)	783.022	757.650	25.373	3.3
UVB- Power (mW/cm2)	746.388	717.678	28.710	4.0
UVC- Power (mW/cm2)	265.007	258.229	6.778	2.6
UVV- Power (mW/cm2)	1568.759	1397.594	171.166	12.2
UVA- Energy (mJ/cm2)	531.358	545.403	-14.045	-2.6
UVB- Energy (mJ/cm2)	546.772	578.197	-31.425	-5.4
UVC- Energy (mJ/cm2)	192.437	183.632	8.805	4.8
UVV- Energy (mJ/cm2)	1104.121	984.782	119.339	12.1
Enable cursors	ON			
Time	-0.02			
Time - Ref	11.13			

EIT UV POWERVIEW SOFTWARE® III

UV PowerView Software® III:

- Works with all EIT Profiling radiometers including the UviCure Plus II/Power Puck II Profilers, PowerMAP II, LEDCure Profiler and LEDMAP
- Allows you to track a single source or production line under different process conditions or over time
- Allows for evaluation and comparison of two different source types
- Provides a section to add information and notes to each file
- Easily transfers profiles and tables into reports & programs, export the .tdms file into Excel

PowerView Software III Graph by File Screen



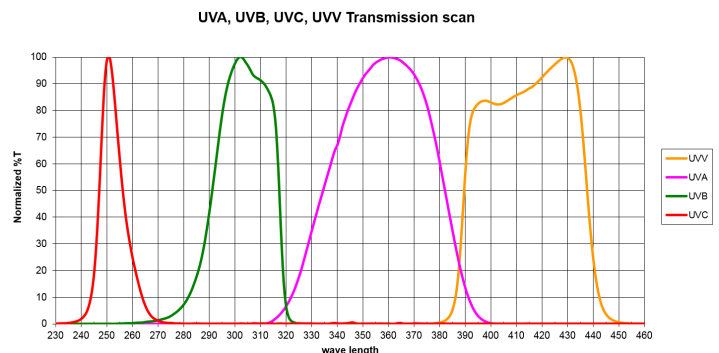
Dynamic (Operating) Ranges

There are three dynamic ranges available that are selected at the time of order.

- The standard range (10 Watt) works well for high power curing applications
- The mid-range (1 Watt) works well with low power arc lamps and in applications with lamps that are non focused or away from the cure surface
- The low range (100 mW) works well in exposure systems and applications with low power lamps

EIT Bands

- EIT Puck Instruments are available with UVA (320-390nm), UVB (280-320nm), UVC (250-260nm) and/or UVV (395-445nm)
- The UV Power Puck II is available only with all **four** EIT bands, the UVICURE Plus II is available in any **one** EIT band, selected at the time of order



Product Specifications

Display	Easy to Read, Yellow Text on Black Background
Suggested Operating Ranges	Standard High Range: UVA, UVB, UVV- 100mW/cm ² to 10W/cm ² / UVC - 10mW/cm ² to 1W/cm ² Mid-Range: UVA, UVB, UVV-10mW/cm ² to 1W/cm ² / UVC-1mW/cm ² to 100mW /cm ² Low Power: UVA, UVB, UVV- 1mW/cm ² to 100mW/cm ² / UVC -1mw/cm ² to 100mW/cm ² The suggested Operating Ranges are where the instrument performs best. Units will “turn on” and display data at irradiance values much lower than the suggested Operating Ranges.
Accuracy	+/- 10%; +/- 5% typical plus ±0.2% of full scale Typical +/- 5% or better
Calibration	Supplied with NIST traceable calibration certificate
Spectral Ranges (UV Power Puck® II)	Four channel monitoring of UVA (320-390 nm), UVB (280-320nm) , UVC (250-260nm) and UVV (395-445nm)
Spectral Ranges (UVICURE® Plus II)	One channel monitoring of UVA (320-390 nm), UVB (280-320nm) , UVC (250-260nm) or UVV (395-445nm) , selected at the time of purchase
Spatial Response	Approximately cosine, “Lambertian”
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods (audible alarm indicates when temperature has exceeded tolerance)
Smooth Modes	Smooth ON: Effective Sample rate of 25 samples/second Smooth PROFILER: Effective Sample rate of 128 samples/second Smooth OFF: Effective Sample rate of 2048 samples/second
Sample Rate for Profiling	Profiler instruments use a fixed sample rate of 128 samples/second for profiling. For best matching between instrument display and UV PowerView Software® III values, use Smooth PROFILE mode
Memory Capacity For Profiling	The memory capacity of the Power Puck® II and UVICURE® Plus II Profilers in Profiler Mode is sufficient to collect data for >100 minutes
UV PowerView Software® III	National Instruments LabVIEW based programming designed for Windows 7-10. Collected data is stored in LabVIEW based *.tdms files
Time-Out Period	2 minutes DISPLAY mode (no key activity)
Battery/Battery Life	Two user-replaceable AAA Alkaline Cells/Approximately 20 hours with display on
Dimensions	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H)
Weight	10.1 ounces (289 grams)
Instrument Materials	Aluminum, stainless steel
Carrying Case Material/Weight	Cut polyurethane interior, scuff resistant nylon exterior cover/9 ounces (260 grams)
Carrying Case Dimensions	10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D)

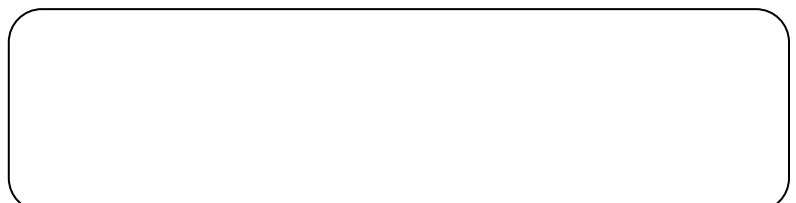
This equipment is in conformity with the following standards and therefore bears CE marking: IEC 61326-1:2005, EN55011: 1998, EN61000-4-2: 1995, A1: 1998, A2: 2001; EN 61000-4-3: 2002, A1: 2002, following the provisions of the applicable directives: 98/34/EEC and amendments, 89/336/EEC and amendments.



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PUCK PROFILER SAL-B1002 Rev 01.00 January 2023

UVICure Plus II



*UviCure Plus II
A single band radiometer*



*UV Power Puck II
A four band radiometer*

EIT has designed, manufactured, sold and supported industrial UV measurement solutions worldwide since 1986. The UviCure Plus II and UV Power Puck II radiometers utilize our experience and build on previous versions of our instruments. They are easy to use and help to establish, document, maintain and troubleshoot process windows in industrial UV curing applications.

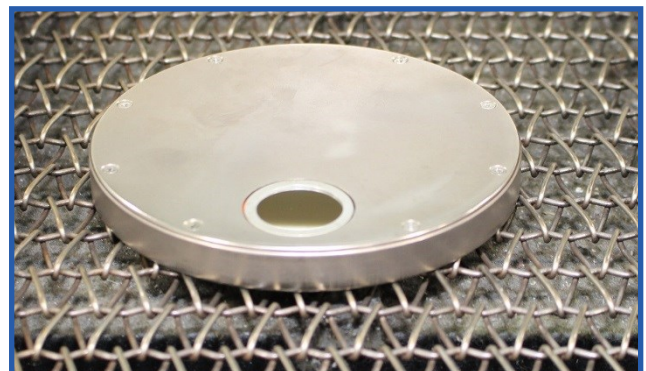
The instrument display (right) provides irradiance (W/cm^2) and energy density (J/cm^2) values as well as the irradiance profile.



The UviCure Plus II is a single band radiometer with the band specified at the time of order. EIT UVA (320-390 nm) is the most common band ordered for applications using mercury bulbs.

The UV Power Puck II is a four band radiometer with EIT UVA, UVB, UVC and UVV. Having the four EIT bands in a single instrument allows the user to identify bulb (mercury-H, mercury-iron-D, mercury-gallium-V) types.

The Power Puck II allows you to independently monitor the wavelengths associated with surface cure (UVC) as well as those responsible for through cure (UVA/UVV). Tracking the ratio of UVC:UVA can indicate when your reflector is getting dirty. Looking at UVA:UVV can indicate when a mercury-gallium bulb has aged and is spectrally closer to a mercury bulb than a mercury-gallium bulb.



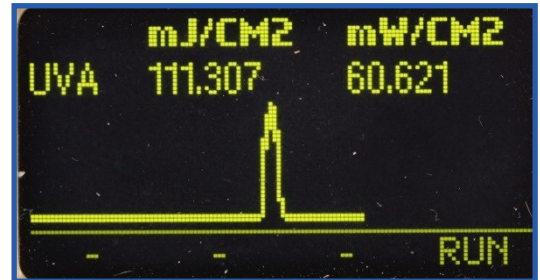
UviCURE[®] PLUS II & UV POWER PUCK[®] II FEATURES

The UviCure Plus II (single band) and Power Puck II (four band) radiometers are easy to use and offer a number of user selected options for the display and sampling rate.

- **Easy to Use:** A Single Button allows the user to turn the unit on, collect & view the data.



- **Graph:** A graph illustrating the peak UV irradiance and total energy is displayed for each UV band. The graph shows the irradiance as a function of time (W/cm^2 on Y-axis, time on X-axis) with the number of lamps and intensity of each shown.



- **Reference:** Allows the user to store a run in the instrument memory to allow for easy comparison to current UV conditions.



- **Toggle:** (Not Shown) Available on the UviCure Plus II. Allows the user to easily switch between Graph and Reference display screens with the push of a button.

- **All Channel:** Available on the Power Puck II. All Channel displays the Joules/cm² & Watts/cm² data on one screen for all four bands (UVA, UVB, UVC & UVV).



- **Setup:** Used to select instrument options including the Display Mode (Graph, Reference, Toggle, All Channel), Effective Sample Rate (Smooth), Units (J/W, mJ/mW or $\mu J/\mu W$) and Display Brightness.



UVICURE[®] PLUS II & UV POWER PUCK[®] II FEATURES

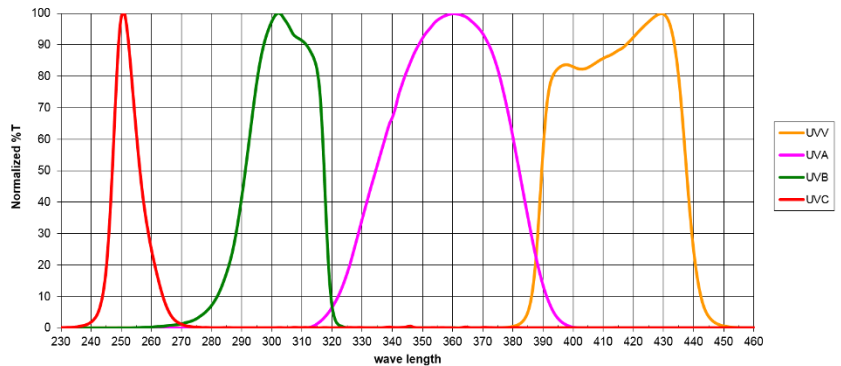
The UviCure Plus II is a single band radiometer with the EIT Band and Dynamic Range specified at the time of order. The Power Puck II is a four band radiometer with the Dynamic Range specified at the time of order.

EIT Broadband Responses

EIT's Broadband responses are optimized for mercury based sources and have the following responses:

- UVA (320-390nm)
- UVB (280-320nm)
- UVC (250-260nm)
- UVV (395-445nm)

UVA, UVB, UVC, UVV Transmission scan



EIT Dynamic (Operating) Ranges

The dynamic range of the UVICURE Plus II/Power Puck II is selected at the time of order and is based on the output of the UV source and instrument distance to the UV source.

- The Standard (H) High (10 Watt) range works well for high power curing applications
 - The (M) Mid-range (1 Watt) works well with low power arc lamps and in applications with lamps that are non- focused or away from the cure surface
 - The low range (100 mW) works well in exposure systems and applications with low power lamps
- Refer to the Product Specifications on page four for more information.

Instrument Sample Rate (Smooth) Functions

The UviCure Plus II and Power Puck II oversample at an extremely high rate. The user is able to adjust the effective sample rate used for data collection. For most applications, we recommend the **Smooth Profiler** setting.

- **Smooth On:** Effective sample rate of 25 Hz (samples per second), matches obsolete Power Puck units
- **Smooth Profiler:** Effective sample rate of 128 Hz, suggested rate for most applications. The Smooth Profiler setting reports the average (RMS) peak intensity.
- **Smooth Off:** Effective sample rate of 2048 Hz. Fast enough to detect the AC cycling in a 50/60 Hz power supply. Reports the instantaneous irradiance value which is higher than the RMS value.

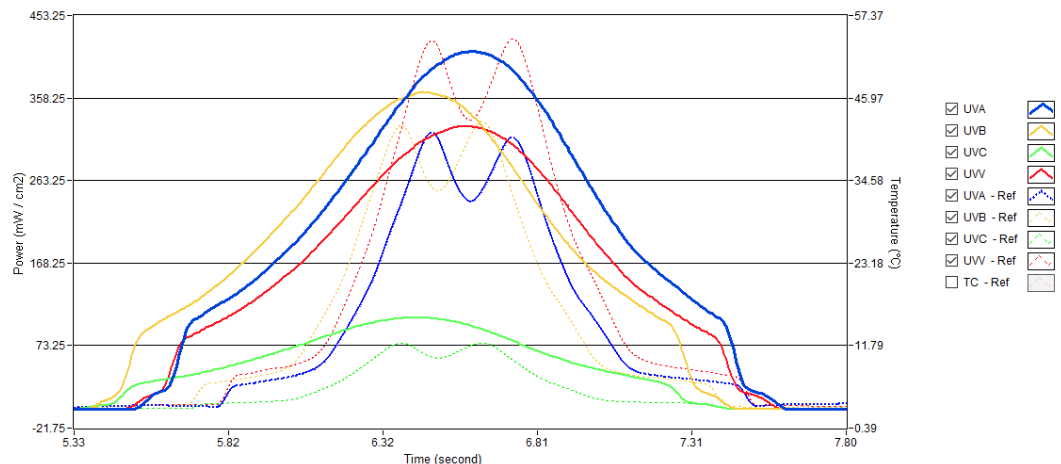
Optional Profiler Versions

Profiler versions of the UviCure Plus II/UV Power Puck II operate in the same manner as the Standard (display) versions. Profiler versions allow the transfer of the numerical data (irradiance, energy density) values **and** the irradiance profile (Watts as a function of time) to EIT's UV PowerView Software[®] III Program. Profiler units must be configured at the time of the initial order or returned to EIT for an upgrade.

This allows the user to:

- Analyze system changes over time
- Look at individual lamps
- Compare multi-lamp systems
- Trouble shoot lines
- View lamp focus
- Determine lamp type

Contact EIT to learn more about the Profiler versions



UVICURE® PLUS II & UV POWER PUCK® II FEATURES

Product Specifications (Specifications subject to change without notice)

Display	Easy to Read, Yellow Text on Black Background
Suggested Operating Ranges	Standard High Range: UVA, UVB, UVV - 100mW/cm ² to 10W/cm ² / UVC - 10mW/cm ² to 1W/cm ² Mid-Range: UVA, UVB, UVV - 10mW/cm ² to 1W/cm ² / UVC: 1mW/cm ² to 100mW/cm ² Low Power: UVA, UVB, UVV - 1mW/cm ² to 100mW/cm ² / UVC - 1mW/cm ² to 100mW/cm ² The suggested Operating Ranges are where the instrument performs best. Units will “turn on” and display data at irradiance values much lower than the suggested Operating Ranges.
Accuracy	+/- 10%; +/- 5% typical plus ±0.2% of full scale Typical +/- 5% or better
Calibration	Supplied with NIST traceable calibration certificate
Spectral Ranges (UV Power Puck® II)	Four channel monitoring of UVA (320-390 nm), UVB (280-320nm), UVC (250-260nm) and UVV (395-445nm)
Spectral Ranges (UVICURE® Plus II)	One channel monitoring of UVA (320-390 nm), UVB (280-320nm), UVC (250-260nm) or UVV (395-445nm), selected at the time of purchase
Spatial Response	Approximately cosine, “Lambertian”
Operating Temperature	0-75°C Internal temperature; tolerates high external temperatures for short periods (audible alarm indicates when temperature has exceeded tolerance)
Smooth Modes	Smooth ON: Effective Sample rate of 25 samples/second Smooth PROFILER: Effective Sample rate of 128 samples/second Smooth OFF: Effective Sample rate of 2048 samples/second
Time-Out Period	2 minutes DISPLAY mode (no key activity)
Battery/Battery Life	Two user-replaceable AAA Alkaline Cells/Approximately 20 hours with the display “on”
Dimensions	4.60 x 0.50 inches; 117 mm x 12.7 mm (D x H)
Weight	10.1 ounces (289 grams)
Instrument Materials	Aluminum, stainless steel
Carrying Case Material/Weight	Cut polyurethane interior, scuff resistant nylon exterior cover/9 ounces (260 grams)
Carrying Case Dimensions	10.75 x 3.5 x 7.75 inches; 274 x 89 x 197 mm (W x H x D)

This equipment is in conformity with the following standards and therefore bears CE marking: IEC 61326-1:2005, EN55011: 1998, EN61000-4-2: 1995, A1: 1998, A2: 2001; EN 61000-4-3: 2002, A1: 2002, following the provisions of the applicable directives: 98/34/EEC and amendments, 89/336/EEC and amendments.



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SAL-B1001 Plus Puck Brochure Rev 01.00 January 2023

EIT 2.0™ LLC

UViCURE® PLUS II PROFILER

UV POWER PUCK® II PROFILER

One Instrument: Two Options

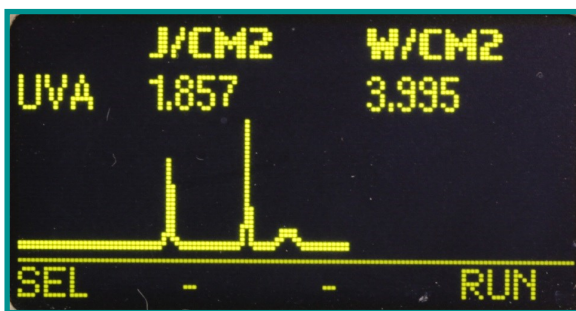
The UviCure Plus II Profiler and Power Puck II Profiler radiometers support:

- Easy-to-use single button operation for production or lab environments with all values on the display
- Profiling function for laboratory, R&D, field service and troubleshooting calls

ONE INSTRUMENT

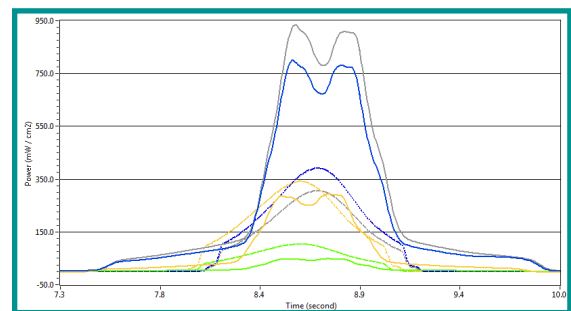


TWO OPTIONS



DISPLAY OPTION

- The **Display Option** presents the data (W/cm^2 , J/cm^2 & low resolution irradiance profile) on the display
- Single button operation for ease of use on a production line



PROFILER OPTION

- The **Profiler Option** transfers the data including the irradiance profile to a computer
- EIT's UV PowerView Software® III allows for further analysis, comparison and evaluation.

UViCURE[®] PLUS II PROFILER & UV POWER PUCK[®] II PROFILER

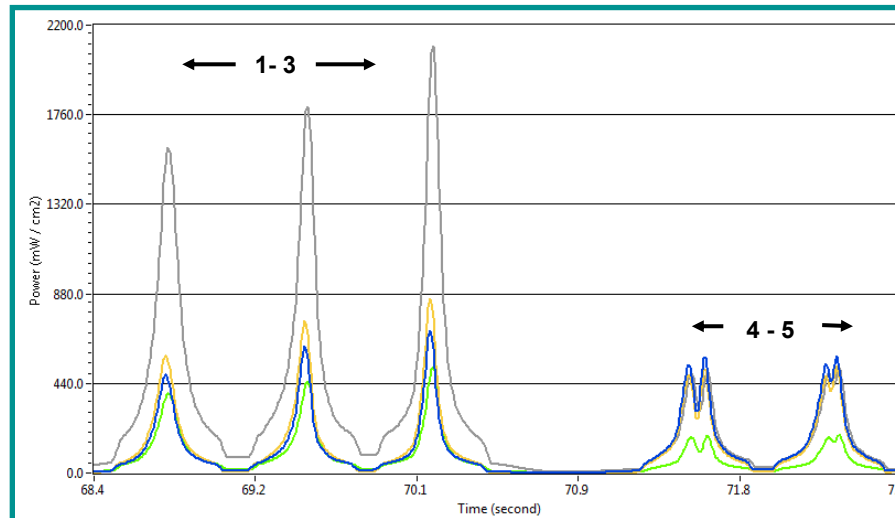
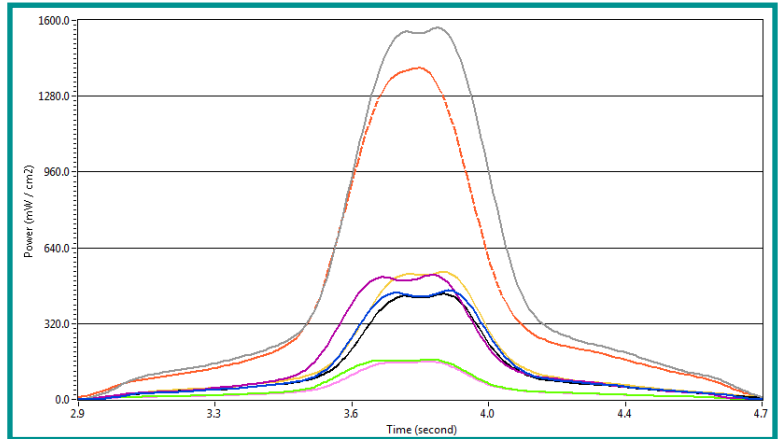
Profiler versions of the UviCure Plus II or UV Power Puck II operate in the same manner as Standard units, The Profiler function allows the transfer of the numerical (irradiance, energy density) values **and** the irradiance profile (Watts as a function of time) to a computer via a USB port for analysis with the EIT UV PowerView Software[®] III Program.

Puck Profiler Instrument Features:

- Profiler data collected at an effective sample rate of 128 Hz (samples/second)
- Display data collected at a user adjustable effective sample rate of 25, 128 or 2048 Hz (samples/second)
- Memory supports data collection of over 100 minutes

EIT Profiler units quickly and easily identify:

- The number of lamps and individual lamp performance
- Lamp focus conditions and changes to the focus
- The bulb type (Four band Power Puck II Profilers)
- Uniformity of UV across bulb length changes over time with the comparison to stored files
- Process speed and/or exposure time variations
- Maintenance needs before they impact product quality



Five Production Line UV Stations

Lamps 1-3

- Different output values
- Focused lamps
- Mercury-Gallium bulbs

Lamps 4-5

- Similar output values
- Non-focused lamps based on the "twin peaks" for each bulb
- Mercury bulbs

Data can be arranged by parameter (shown) or bandwidth

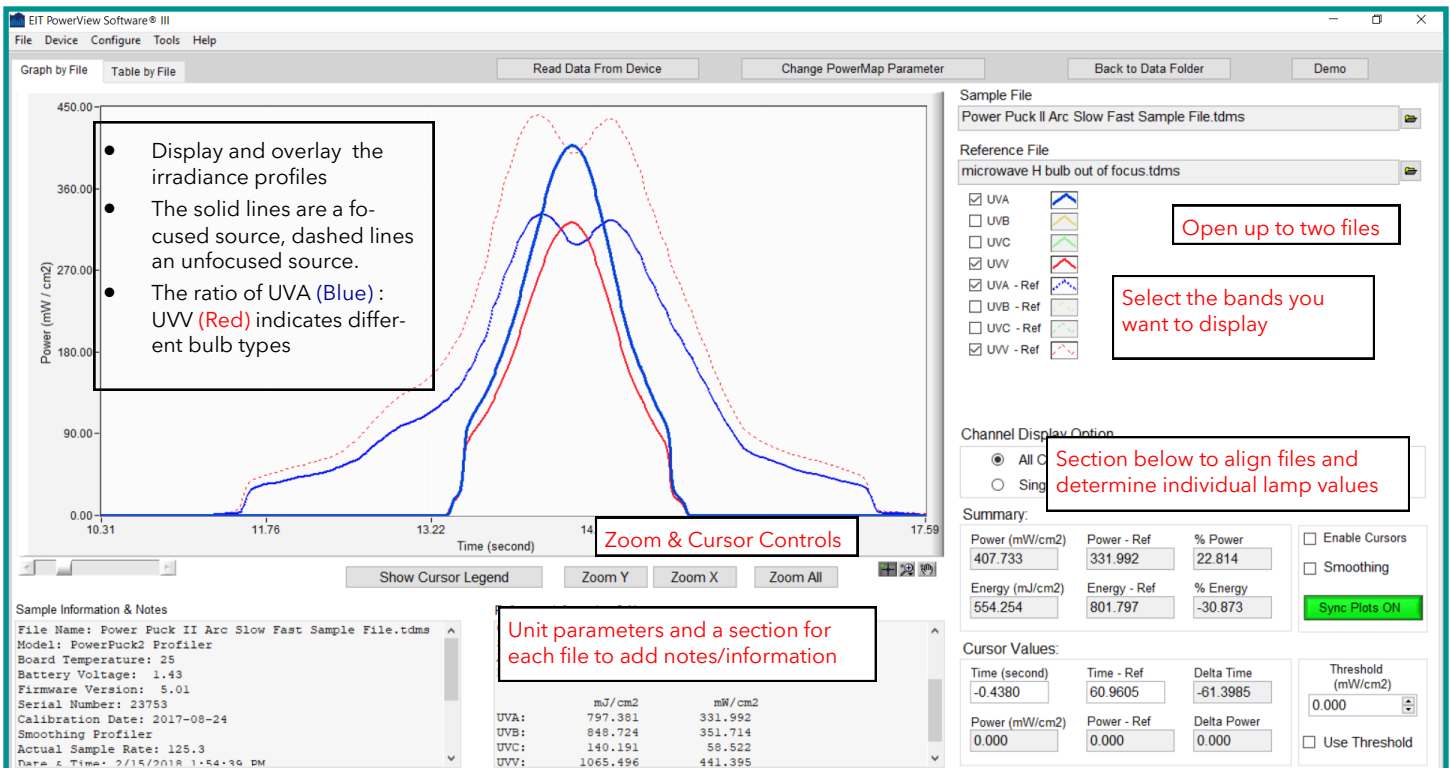
Summary By Table				
	Sample File	Reference File	Difference	%
UVA- Power (mW/cm2)	783.022	757.650	25.373	3.3
UVB- Power (mW/cm2)	746.388	717.678	28.710	4.0
UVC- Power (mW/cm2)	265.007	258.229	6.778	2.6
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Enable cursors	ON			
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EIT UV POWERVIEW SOFTWARE® III

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PowerView Software III Graph by File Screen



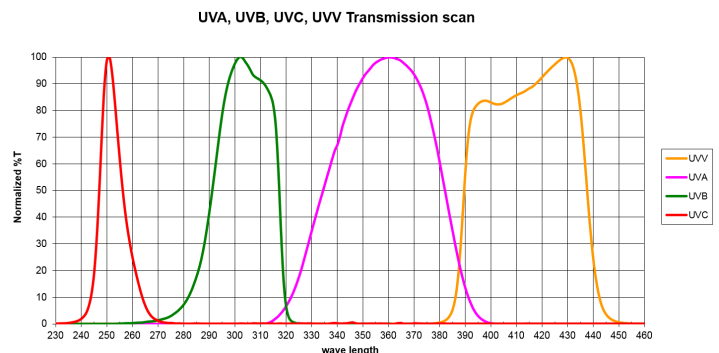
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Memory Capacity For Profiling	The memory capacity of the Power Puck® II and UVICURE® Plus II Profilers in Profiler Mode is sufficient to collect data for >100 minutes
UV PowerView Software® III	National Instruments LabVIEW based programming designed for Windows 7-10. Collected data is stored in LabVIEW based *.tdms files
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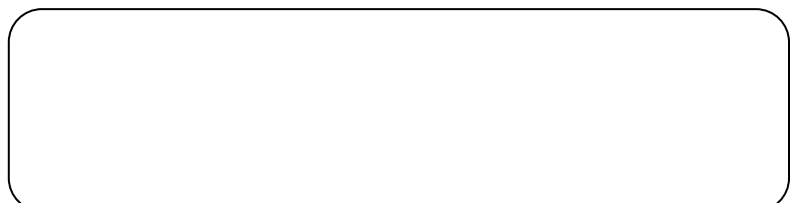
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PUCK PROFILER SAL-B1002 Rev 01.00 January 2023

Systems

UV Flood Systems

Compact, Programmable UV Flood Curing System

The IntelliRay is a compact UV flood curing system that incorporates complete programmability. This system, controlled by a microprocessor, integrates all essential components into a small lamp head. The design allows for effortless installation, either on the optional Rayven benchtop curing chamber or any location on a factory floor. The requirement for cabling or separate power boxes is almost entirely eliminated. Installation simply involves mounting the lamp head and connecting the AC line cord, enabling the user to commence timed exposure curing swiftly. A standout feature of the system is its integrated retractable shade type shutter. This facilitates repeatable exposure timing while simultaneously shielding the user from potential UV radiation. The IntelliRay system also comes equipped with an LCD display and a digital keypad. These features significantly simplify the process of programming and monitoring the curing operations, providing an intuitive and user-friendly interface. The user can easily input desired settings and monitor the ongoing process, ensuring optimal curing results.



Features



System Timers

Duration of curing is controlled by a 1–9,999 second or hour exposure timer that actuates the shutter. The exposure timer also has a user-controlled manual mode and a mode for use in long exposure applications such as artificial aging or solar panel testing.

Lamp Intensity Control

The system has a user-adjustable intensity level. This feature provides the flexibility of choosing appropriate curing intensity for sensitive materials. You can password protect time, intensity and all other settings.

Remote Control via PC Serial Port

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

External Logic Signal Interface

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

Best-in-Class Lamp Life

The enhanced lamp life of the system rivals even microwave and LED systems, significantly lowering operating and maintenance costs. Typical lamp life (intensity versus time) charts are available for 200W, 400W, and 600W IntelliRay systems.



Dimensions & Specs

- **System Type:** Parabolic Flood Curing System
- **Part #s:** UV2018; UV0338; UV0832
- **Lamp Power:** 200W; 400W; 600W
- **Input Voltage:** 100-120 / 200-240 AC ±10% (auto-ranging)
- **Input Current (Max @ 120/240V):** 3.5A/2.0A; 7.0A/3.5A; 10.0A/5.0A
- **Typical UVA Irradiance at 3":** 32mW/cm²; 115mW/cm²; 175 mW/cm²
- **Curing Area:** 8 x 6"
- **Weight:** 13lbs
- **Size (L x W x H):** 11 x 10 x 9"

System Part Numbers

PART	Item	Details
UV2018	IntelliRay 200	Compact, programmable UV flood curing system. Contains integrated retractable shade type shutter, LCD display, digital keypad, carrying handle & sliding height adjustment bracket. 8x6" curing area.
UV0338	IntelliRay 400	
UV0832	IntelliRay 600	

Accessories

PART	Item	Details
UV1080	Rayven Shielding Curing Chamber	Provides full shielding and shutter door interlock
UV0454	Adjustable Height Flood Stand	Used with IntelliRay for bench top batch curing
UV0455	Wrap-around UV Shield	Provides basic UV shielding (used with UV454)
UV1094	Rear UV Shield	Rear protection for blocking low level backside UV
UV2128	Flood Filter Glass	Replacement filter glass. Filters shortwave and infrared wavelengths
UV2676	Dichroic Flood Filter Glass	Optional dichroic filter glass for SunRay and IntelliRay floods.
UV0331	IntelliRay Shutter Shade	Replacement shutter shade for IntelliRay System
UV0725	Shutter Control Foot Pedal	Provides hands-free control of shutter and exposure timing
UV0527-XX	IntelliRay Remote Control Interface Software	Windows 98/00/XP/7/8/10/11 GUI (firmware dependent)
UV0525	RS232 Remote Interface Cable	For use with above software
UV0526	RS485/Logic Remote Interface Cable	Control from RS485 PC or digital logic
Multiple	Power Cords	Multiple types available
Multiple	UV Curing Tray	Stainless steel non-stick surface
UV1450-XX	Uvicure Plus II Integrating Radiometer	UVA, UVB, UVC or Visible spectral ranges (available in multiple ranges)
UV0495	UV/IR Protective Safety Glasses	OTG (fit over prescription eyewear), 3.0 shade
UV2231	UV/IR Protective Safety Glasses	Sport contour, 3.0 shade
UV1889	UV Protective Face Shield	Lift-up face shield ideal for maximum UV/Visible protection, 3.0 shade
UV2025	IntelliRay 200 Instruction Manual	Usage and maintenance info for IntelliRay 200 System
UV0576	IntelliRay 400 Instruction Manual	Usage and maintenance info for IntelliRay 400 System
UV0841	IntelliRay 600 Instruction Manual	Usage and maintenance info for IntelliRay 600 System

Large Area, Programmable UV Flood Curing System

The IntelliRay Quad is an advanced, programmable UV flood curing system, designed for large-area applications. The system combines all essential components into one easily mountable unit. This integration makes it remarkably simple to set up on the optional Rayven Quad benchtop UV curing chamber or any location within a factory, minimizing the requirement for extensive cabling or separate power boxes. User interaction with the system is made effortless through an LCD display and digital keypad, which streamline the programming and real-time monitoring of curing operations. The system is equipped with four durable 600W metal halide arc lamps. These, along with parabolic reflectors, ensure evenly distributed UV light over a substantial curing area measuring 16 x 12 inches. This feature allows for efficient and effective large-scale curing operations. A retractable shutter shade ensures accurate and repeatable exposure timing while safeguarding users from UV radiation.



Features



System Timers

Duration of curing is controlled by a 1–9,999 second or hour exposure timer that actuates the shutter. The exposure timer also has a user-controlled manual mode and a mode for use in long exposure applications such as artificial aging or solar panel testing.

Lamp Intensity Control

The system has a user-adjustable intensity level. This feature provides the flexibility of choosing appropriate curing intensity for sensitive materials. You can password protect time, intensity and all other settings.

Remote Control via PC Serial Port

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

External Logic Signal Interface

The system can be controlled remotely using digital logic signals available at a 15 pin D-sub connector on the unit's rear panel. The digital logic functions allow high-speed control for applications requiring a direct interface with machine controllers or PLCs.

Best-in-Class Lamp Life

The enhanced lamp life of the system rivals even microwave and LED systems. This extended longevity serves to substantially reduce operating and maintenance costs, demonstrating exceptional value and performance over time.



Dimensions & Specs

- **System Type:** Parabolic Flood Curing System
- **Part #s:** UV2591-H
- **Lamp Power:** 2400W (4 x 600W)
- **Input Voltage:** 200–240 VAC ±10%
- **Input Current:** 16A
- **Irradiance at 4”:** 110 mW/cm² UVA, typical
- **Curing Area:** 16 x 12”
- **Weight:** 26.6lbs
- **Size (L x W x H):** 17.45 x 23 x 7.75”

System Part Numbers

PART	Item	Details
UV2591-H	IntelliRay Quad, 240VAC, 50/60Hz	Large area, programmable UV flood curing system. Includes 600W UVA enhanced arc lamp, UV/IR protective glasses, power cord and manual.

Accessories

PART	Item	Details
UV2875-H	Rayven Quad Shielding Curing Chamber	Provides full shielding and shutter door interlock
UV2605	Quad Flood Filter Glass	Replacement filter glass. Filters shortwave and infrared wavelengths
UV2607	IntelliRay Shutter Shade	Replacement shutter shade for IntelliRay Quad System
UV0725	Shutter Control Foot Pedal	Provides hands-free control of shutter and exposure timing
UV0527-XX	IntelliRay Remote Control Interface Software	Windows 98/00/XP/7/8//10/11 GUI (firmware dependent)
UV0525	RS232 Remote Interface Cable	For use with above software
UV0526	RS485/Logic Remote Interface Cable	Control from RS485 PC or digital logic
Multiple	Power Cords	Multiple types available
UV1450-XX	Uvicure Plus II Integrating Radiometer	UVA, UVB or Visible spectral ranges (available in multiple ranges)
Multiple	UV Curing Tray	Stainless steel non-stick surface
UV0495	UV/IR Protective Safety Glasses	OTG (fit over prescription eyewear), 3.0 shade
UV2231	UV/IR Protective Safety Glasses	Sport contour, 3.0 shade
UV1889	UV Protective Face Shield	Lift-up face shield ideal for maximum UV/light protection, 3.0 shade

Replacement Lamps

PART	Item	Details
UV0834	UVA Metal Halide Lamp	600W medium pressure
UV1884	UVB Enhanced Lamp	600W medium pressure
UV1074	Visible Metal Halide Lamp	600W medium pressure, 420nm

Portable, Handheld UV Flood Curing System

The PortaRay is a handheld light curing system that offers portability and versatility for a range of UV and visible curing applications. With its effective curing area reaching up to 5 x 5 inches, it's well-suited for small parts curing. The system is available in two configurations - solely as a lamp head, or accompanied by an optional latched bottom accessories box. The lamp head can be employed for handheld operations, or it can be mounted to various setups, such as a stand, conveyor, machine, fixture, or robot. Boasting a straightforward yet technologically advanced design, the PortaRay is remarkably user-friendly and dependable. It demands almost no setup time or learning curve from the user. At a lightweight 6 pounds, it's an excellent choice for curing applications that necessitate frequent system relocation.



Features



Fully Integrated Lamp Head

The hand-held 3.5lb lamp head contains a long life 400 or 600 Watt metal halide type lamp, which emits evenly distributed UVA, UVB or visible light. Typical lamp life is 2000 hours. Lamp reflector available as a parabolic 5" x 5" type or as a focused 5" x 3" type.

Lamp Power Regulation

The system's switch mode power supply maintains constant lamp power regardless of variations in AC line input or lamp voltages. This regulation provides for repeatable curing times and longer lamp life.

Standby Mode

The unit features a standby mode rocker switch, which reduces lamp power while idling. This mode can be used to reduce heat and stray UV light output while the system is not in use.

Mounting Options

The system includes an enclosed headrest with optional drawer for holding the lamp head during idle periods. A stand and front and rear shields are available for 360 degree light shielding.

Ideal for Small Part Curing

Boasts an effective curing area of up to 5 x 5 inches. This attribute, along with its flexibility and ease of use, makes it particularly suitable for small parts curing. Thus, whether for intricate electronic components, delicate jewelry pieces, or various other applications, the PortaRay emerges as the go-to solution for small part curing tasks.



Dimensions & Specs

- **System Type:** Portable Flood Curing System
- **Part #s:** UV2270; UV2267; UV2265; UV2258
- **Lamp Power:** 400W; 600W
- **Input Voltage:** 100-120 / 200-240 AC \pm 10% (auto-ranging)
- **Input Current (Max @ 120/240V):** 7.0A/3.5A; 10.0A/5.0A
- **UVA Intensity @ 3":** 200-270mw/cm²
- **Curing Area:** Parabolic 5 x 5", Focused 5 x 3"
- **Weight:** 3.15lbs (head only), 6lbs (with Acc. box)
- **Size (L x W x H):** 8 x 5 x 6" (head only), 8 x 5 x 16.5" (with Acc. box)

PortaRay System Configurations

PART	Input (VAC)	Lamp Power (W)	Reflector Type	UVA Intensity (mw/cm ² @ 3")	Optional Acc. Box & Drawer Headrest
UV2270	120	400	Parabolic	200	Head Only, Closed Rest
UV2267	240	400	Parabolic	200	Head Only, Closed Rest
UV2272	120	400	Focused	240	Head Only, Closed Rest
UV2269	240	400	Focused	240	Head Only, Closed Rest
UV2274	120	400	Parabolic	200	w/ Accessory Box, Drawer Rest
UV2273	240	400	Parabolic	200	w/ Accessory Box, Drawer Rest
UV1197	120	400	Focused	240	w/ Accessory Box, Drawer Rest
UV1198	240	400	Focused	240	w/ Accessory Box, Drawer Rest
UV2265	120	600	Parabolic	270	Head Only, Closed Rest
UV2258	240	600	Parabolic	270	Head Only, Closed Rest

Accessories

PART	Item	Details
UV3103	PortaRay Stand & Shield Assembly	Includes stand, front shield, rear shield & PortaRay mounting bracket
UV1729	PortaRay Mounting Bracket Kit	Mounting bracket, flood bracket, knob, measurement tape & hardware
UV0454	Adjustable Height Flood Stand	Used with PortaRay & PortaRay mounting bracket for bench top curing
UV0455	Wrap-around UV Shield	Provides basic UV shielding
UV1094	Rear UV Shield	Supplemental rear protection for blocking low level backside UV light
Multiple	Power Cords	Multiple types available
UV4270	PortaRay Carrying Case	24 x 17 x 10"
UV1450-XX	Uvicure Plus II Integrating Radiometer	UVA, UVB or Visible spectral ranges (available in multiple ranges)
UV1422	UV Protective Gloves	Cotton Knit Work Gloves for UV light shielding
UV4783	UV/IR Protective Safety Glasses	Sleek OTG (fit over prescription eyewear), 5.0 shade
UV2232	UV/IR Protective Safety Glasses	Sport contour, 5.0 shade
UV1890	UV Protective Face Shield	Lift-up face shield ideal for maximum protection, w/ darker 5.0 shade

Replacement Lamps

PART	Item	Details
UV0320	UVA Metal Halide Lamp	400W medium pressure
UV0544	UVB Enhanced Lamp	400W medium pressure
UV0489	Visible Metal Halide Lamp	400W medium pressure, 420nm
UV0545	Visible Metal Halide Lamp	400W medium pressure, 460nm
UV0834	UVA Metal Halide Lamp	600W medium pressure
UV1884	UVB Enhanced Lamp	600W medium pressure
UV1074	Visible Metal Halide Lamp	600W medium pressure, 420nm

Compact, Programmable LED Flood Curing System

The SkyRay 800 is a compact, microprocessor-controlled LED flood curing system. It integrates all essential system components into a compact lamp head that is easy to install anywhere on a factory floor, eliminating the need for a separate controller, power supply box, or remote cooler. After mounting the lamp head and connecting the AC power cord, the user can immediately commence timed exposure curing. The system utilizes long-lasting, solid-state LEDs to illuminate a 5x5 inch curing area with cool, high-intensity light that is distributed evenly. Notably, the system comes equipped with an integrated exposure timer and adjustable output intensity, offering increased control over the curing process. User interaction is simplified with a front panel LCD display and a sealed membrane type keypad, making the programming and monitoring of curing operations intuitive and efficient.



Features



System Timers

Duration of curing is controlled by a 1 to 9999 second timer that turns off the LEDs and beeps after exposure is complete. The timer can alternatively be switched to a 1 to 9999 hour mode for use in artificial aging or other long exposure applications.

Lamp Intensity Control

The system has a user-adjustable intensity level. This feature provides the flexibility of choosing appropriate curing intensity for sensitive materials. You can password protect time, intensity and all other settings.

Remote Control via PC Serial Port

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

External Logic Signal Interface

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

Optional LED Spectrums

The SkyRay is available with 365nm @ 1300mW/cm², 385nm @ 1700 mW/cm², 395nm @ 1900mW/cm² & 405nm @ 2200 mW/cm² LEDs, which ensure compatibility with many types of adhesives and coatings from all manufacturers.



Dimensions & Specs

- **System Type:** LED Flood Curing System
- **Part #s:** UV3805; UV3153; UV3937; UV3896
- **Lamp Power:** 800W
- **Input Voltage:** 100-120 / 200-240 AC ±10% (auto-ranging)
- **Input Current (Max @ 120/240V):** 13.0/6.5 Amps
- **Irradiance @ 1":** 1200mw/cm²
- **Curing Area:** 5 x 5"
- **Weight:** 11.25lbs
- **Size (L x W x H):** 6.9 x 5.44 x 10.9"

System Part Numbers

PART	Wavelength	Details
UV3805	365nm	SkyRay 800 with 365 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3153	385nm	SkyRay 800 with 385 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3937	395nm	SkyRay 800 with 395 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3896	405nm	SkyRay 800 with 405 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual

Accessories

PART	Item	Details
UV1080	Rayven Shielding Curing Chamber	Provides full shielding and shutter door interlock
UV3699	SkyRay Mounting Bracket Assy	w/ fasteners & right angle DB15 interconnect cable
UV3164	LED Filter Glass	Replacement Filter Glass For SkyRay 800
UV0725	LEDs Control Foot Pedal	Provides hands-free control of shutter and exposure timing
UV3904-XX	SkyRay Remote Control Interface Software	Windows 98/00/XP/7/8/10/11 GUI (firmware dependent)
UV3902	Right Angle USB cable	2.0 meter, black
UV3383	USB to 2-Wire RS485 Adapter / Converter	Connect PC to RS485, used with UV3924
UV3924	RS485 Remote Interface Cable, DB15 to DB9	Connect multiple units together, used with UV3383
UV0526	RS485 Logic Remote Interface Cable	Control from RS485, PC or digital logic
Multiple	Power Cords	Multiple types available
Multiple	UV Curing Tray	Stainless steel non-stick surface
UV4006	LEDCure Radiometer	Dynamic range 0.4-40W/cm ² . Available in L365, L385, L395 or L405.
UV2231	UV/IR Protective Safety Glasses	Sport contour, 3.0 shade
UV0495	UV/IR Protective Safety Glasses	OTG (fit over prescription eyewear), 3.0 shade
UV1889	UV Protective Face Shield	Lift-up face shield ideal for maximum UV/light protection, 3.0 shade

Compact, High-Power UV Flood Curing System

The SunRay is a compact UV flood curing system. All the essential system components are housed in a small lamp head. This integration significantly simplifies the setup, eliminating the need for extensive cabling or additional remote control boxes. Installation involves mounting the lamp head and connecting the AC line cord, a process that is both quick and straightforward. The system is equipped with a long-lasting 400 or 600-Watt metal halide lamp, complemented by a parabolic reflector. This setup allows for an illumination coverage of an 8" x 6" curing area. The UVA light output is evenly distributed at 115mW/cm² (for the 400W lamp) or 175mW/cm² (for the 600W lamp) within the 320–390nm range, measured at a distance of 3". Further enhancing its functionality, the lamp head is equipped with a handle for easy transport and a sliding bracket, allowing for convenient height adjustments.



Features



Auto-Range AC Line Input

Auto-Ranging 90-132 / 180-265 VAC line input is a key feature that eliminates the complexity and risk of incorrect voltage input. Whatever country you're in, this system auto-detects the voltage level and self-adjusts accordingly.

Lamp Power Regulation

The system's switch mode power supply maintains constant lamp power regardless of variations in AC line input or lamp voltages. This regulation provides for repeatable curing times and longer lamp life.

Standby Mode

Implemented via a simple-to-use rocker switch, standby mode reduces lamp power by half. This can be immensely helpful in reducing heat output and stray UV light when the system is not in use, providing both energy efficiency and improved safety.

Elapsed Hour Meter

The inclusion of a front panel hour meter introduces an additional layer of efficiency and convenience to the user experience. This feature diligently monitors and records the operating time of the lamp, allowing users to keep track of lamp age with ease.

Forced Air Cooling

Incorporation of a forced air cooling system, specifically through the use of baffled fan cooling, significantly enhances the performance and durability of the device. This cooling method guides air flow directly to crucial system components that generate heat during operation. By doing so, it ensures cool operation and maintains high system reliability.



Dimensions & Specs

- **System Type:** Parabolic Flood Curing System
- **Part #s:** UV0446; UV0830
- **Lamp Power:** 400W; 600W
- **Input Voltage:** 100-120 / 200-240 AC ±10% (auto-ranging)
- **Input Current (Max @ 120/240V):** 7.0A/3.5A; 10.0A/5.0A
- **Typical UVA Irradiance at 3":** 115mW/cm²; 175 mW/cm²
- **Curing Area:** 8 x 6"
- **Weight:** 11lbs
- **Size (L x W x H):** 11 x 10 x 9"

System Part Numbers

PART	Item	Details
UV0446	SunRay 400W	Compact, high-power UV flood curing system
UV0830	SunRay 600W	

Accessories

PART	Item	Details
UV0454	Adjustable Height Flood Stand	Used with SunRay for bench top batch curing
UV0455	Wrap-around UV Shield	Provides basic UV shielding
UV1094	Rear UV Shield	Supplemental rear protection for blocking low level backside
UV2128	Flood Filter Glass	Replacement filter glass. Filters shortwave and infrared wavelengths
UV2676	Dichroic Flood Filter Glass	Optional dichroic filter glass. Passes shortwave and infrared wavelengths
Multiple	Power Cords	Multiple types available
Multiple	UV Curing Tray	Stainless steel non-stick surface
UV1450-XX	Uvicure Plus II Integrating Radiometer	UVA, UVB or Visible spectral ranges (available in multiple ranges)
UV0495	UV/IR Protective Safety Glasses	OTG (fit over prescription eyewear), 3.0 shade
UV2231	UV/IR Protective Safety Glasses	Sport contour, 3.0 shade
UV1889	UV Protective Face Shield	Lift-up face shield ideal for maximum UV/light protection, 3.0 shade
UV0503	SunRay 400 Instruction Manual	Usage and maintenance info for SunRay 400 System
UV0884	SunRay 600 Instruction Manual	Usage and maintenance info for SunRay 600 System

Replacement Lamps

PART	Item	Details
UV0320	UVA Metal Halide Lamp	400W medium pressure
UV0544	UVB Enhanced Lamp	400W medium pressure
UV0489	Visible Metal Halide Lamp	400W medium pressure, 420nm
UV0545	Visible Metal Halide Lamp	400W medium pressure, 460nm
UV0834	UVA Metal Halide Lamp	600W medium pressure
UV1884	UVB Enhanced Lamp	600W medium pressure
UV1074	Visible Metal Halide Lamp	600W medium pressure, 420nm

Systems

UV LED Systems

High-intensity, Cool-operation LED Spot Curing System

The SkyBeam is a sleek, high-intensity LED spotlight curing system, perfect for dynamic applications on benchtops and automated production lines. Its integrated design, encompassing an in-built power supply, allows it to adeptly support up to four customizable light guides, negating the need for external adapters. User operations are a breeze, thanks to intuitive exposure controls, foot pedal activation, and the ability to tailor each of the four irradiation channels with adjustable timers and power. Durability is at its core, with robot-grade UV light guide cables that can withstand rigorous use, available in four distinct wavelengths. For those prolonged sessions, its advanced fan-cooling system and temperature sensors ensure the equipment remains at the right temperature. Encapsulated in a contamination-resistant sealed aluminum body, and further secured with a key for authorized adjustments, SkyBeam sets the gold standard for compact, efficient, and secure lighting solutions.



Features



4 Irradiation Channels

The system features 4 independent irradiation channels, each with 0-999.9 second exposure timer and 10 to 100% power adjustment range. Each channel's UV light spot size can be adjusted by replacing the optical lens at the end of its light guide, with the service life of each irradiation channel independently recorded.

Built-in Power Supply

The built-in power supply and compact design ensures the unit occupies minimal space, and eliminates the need to manage an external power adapter.

External Control Interface

The system can be remotely monitored and controlled using isolated logic signals available at the rear panel terminals. The digital logic functions allow high-speed control of the SkyBeam for applications requiring a direct interface with machine controllers or PLCs. Control signals include LEDs on/off and a safety interlock that disables LEDs for operator protection.

Cool Operation

Both convection cooling and fan cooling UV LED light guides are offered. The fan cooling type has better heat dissipation and is suggested for continuous operation. The UV LED light guide has a built-in temperature sensor that monitors the temperature and prevents the light guide from overheating.

Security Key Switch

The system comes with a security key switch that prevents operators from making unauthorized changes to the approved running parameters.

Long-Life Flexible Light Guides

The cable of the UV LED light guides is a 2-meter flexible robot cable, tested to over 10 million bending cycles. 4 wavelengths are available, including 365, 385, 395 and 405 nm.



Dimensions & Specs

- **System Type:** LED Spot Curing System
- **Part #s:** UV3979
- **Input Voltage:** 100–240VAC ±10%
- **Input Current (Max @ 120/240V):** 1.0 Amps at 120V, 0.5 Amps at 240V
- **Irradiance @ 1":** From 900–14,000 mW/cm² UVA (lens dependent)
- **Curing Area:** From 3 mm–15mm spot size (lens dependent)
- **Weight:** 3.25 lbs
- **Size (L x W x H):** 140 mm x 92 mm x 160 mm

System Part Numbers

PART	Item	Details
UV3979-365F	SkyBeam Spot System w/ 365nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-385F	SkyBeam Spot System w/ 385nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-395F	SkyBeam Spot System w/ 395nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-405F	SkyBeam Spot System w/ 405nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-365C	SkyBeam Spot System w/ 365nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-385C	SkyBeam Spot System w/ 385nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-395C	SkyBeam Spot System w/ 395nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-405C	SkyBeam Spot System w/ 405nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm

Light Guide Part Numbers

PART	Item	Details
UV4053-365F	365nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-385F	385nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-395F	395nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-405F	405nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4054-365C	365nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-385C	385nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-395C	395nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-405C	405nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm

Light Guide Lens Part Numbers

PART	Spot Size	Irradiance at Distance	Wavelength
UV4030-12MM	12mm	1.5 W/cm ² at 27mm	365nm
UV4030-6MM	6mm	5.6 W/cm ² at 13mm	365nm
UV4030-4MM	4mm	8.5 W/cm ² at 7mm	365nm
UV4030-3MM	3mm	11 W/cm ² at 6mm	365nm
UV3982-15MM	15mm	1.4 W/cm ² 1.6 W/cm ² 1.9 W/cm ² at 28mm	385nm / 395nm / 405nm
UV3982-12MM	12mm	1.7 W/cm ² 2.0 W/cm ² 2.3 W/cm ² at 26mm	385nm / 395nm / 405nm
UV3982-6MM	6mm	5.3 W/cm ² 6.3 W/cm ² 7.4 W/cm ² at 11mm	385nm / 395nm / 405nm
UV3982-4MM	4mm	10.0 W/cm ² 12.0 W/cm ² 14 W/cm ² at 5mm	385nm / 395nm / 405nm

Accessories

PART	Item	Details
UV4045	Foot Switch, Exposure Control	With flying leads for attachment to controller terminal block
UV4046	Security Switch Replacement Keys	Set of two
UV4047	Power Cord	AC Power Cord, 120V US Plug for SkyBeam
UV2232	UV/IR Protective Safety Glasses	Sport contour, 5.0 shade
UV1890	UV Protective Face Shield	Lift-up face shield ideal for maximum protection, 5.0 shade
UV4006-XX	LEDCure Radiometer	Dynamic range 0.4-40W/cm ² . Available in L365, L385, L395, L405.
UV4244-12	LEDCure Radiometer Light Guide Fixture	Measure spot guide output with EIT radiometer

Compact, Programmable LED Flood Curing System

The SkyRay 800 is a compact, microprocessor-controlled LED flood curing system. It integrates all essential system components into a compact lamp head that is easy to install anywhere on a factory floor, eliminating the need for a separate controller, power supply box, or remote cooler. After mounting the lamp head and connecting the AC power cord, the user can immediately commence timed exposure curing. The system utilizes long-lasting, solid-state LEDs to illuminate a 5x5 inch curing area with cool, high-intensity light that is distributed evenly. Notably, the system comes equipped with an integrated exposure timer and adjustable output intensity, offering increased control over the curing process. User interaction is simplified with a front panel LCD display and a sealed membrane type keypad, making the programming and monitoring of curing operations intuitive and efficient.



Features



System Timers

Duration of curing is controlled by a 1 to 9999 second timer that turns off the LEDs and beeps after exposure is complete. The timer can alternatively be switched to a 1 to 9999 hour mode for use in artificial aging or other long exposure applications.

Lamp Intensity Control

The system has a user-adjustable intensity level. This feature provides the flexibility of choosing appropriate curing intensity for sensitive materials. You can password protect time, intensity and all other settings.

Remote Control via PC Serial Port

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

External Logic Signal Interface

The system can also be controlled remotely via an RS232 / RS485 serial port. A Windows™ compatible graphical interface program allows all system functions to be exercised, and with RS485, multiple units can be networked.

Optional LED Spectrums

The SkyRay is available with 365nm @ 1300mW/cm², 385nm @ 1700 mW/cm², 395nm @ 1900mW/cm² & 405nm @ 2200 mW/cm² LEDs, which ensure compatibility with many types of adhesives and coatings from all manufacturers.



Dimensions & Specs

- **System Type:** LED Flood Curing System
- **Part #s:** UV3805; UV3153; UV3937; UV3896
- **Lamp Power:** 800W
- **Input Voltage:** 100-120 / 200-240 AC ±10% (auto-ranging)
- **Input Current (Max @ 120/240V):** 13.0/6.5 Amps
- **Irradiance @ 1":** 1200mw/cm2
- **Curing Area:** 5 x 5"
- **Weight:** 11.25lbs
- **Size (L x W x H):** 6.9 x 5.44 x 10.9"

System Part Numbers

PART	Wavelength	Details
UV3805	365nm	SkyRay 800 with 365 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3153	385nm	SkyRay 800 with 385 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3937	395nm	SkyRay 800 with 395 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual
UV3896	405nm	SkyRay 800 with 405 nm UV LEDs, Includes UV/IR protective glasses, power cord and manual

Accessories

PART	Item	Details
UV1080	Rayven Shielding Curing Chamber	Provides full shielding and shutter door interlock
UV3699	SkyRay Mounting Bracket Assy	w/ fasteners & right angle DB15 interconnect cable
UV3164	LED Filter Glass	Replacement Filter Glass For SkyRay 800
UV0725	LEDs Control Foot Pedal	Provides hands-free control of shutter and exposure timing
UV3904-XX	SkyRay Remote Control Interface Software	Windows 98/00/XP/7/8/10/11 GUI (firmware dependent)
UV3902	Right Angle USB cable	2.0 meter, black
UV3383	USB to 2-Wire RS485 Adapter / Converter	Connect PC to RS485, used with UV3924
UV3924	RS485 Remote Interface Cable, DB15 to DB9	Connect multiple units together, used with UV3383
UV0526	RS485 Logic Remote Interface Cable	Control from RS485, PC or digital logic
Multiple	Power Cords	Multiple types available
Multiple	UV Curing Tray	Stainless steel non-stick surface
UV4006	LEDCure Radiometer	Dynamic range 0.4-40W/cm2. Available in L365, L385, L395 or L405.
UV2231	UV/IR Protective Safety Glasses	Sport contour, 3.0 shade
UV0495	UV/IR Protective Safety Glasses	OTG (fit over prescription eyewear), 3.0 shade
UV1889	UV Protective Face Shield	Lift-up face shield ideal for maximum UV/light protection, 3.0 shade

Systems
UV Spot Systems

High-intensity, Cool-operation LED Spot Curing System

The SkyBeam is a sleek, high-intensity LED spotlight curing system, perfect for dynamic applications on benchtops and automated production lines. Its integrated design, encompassing an in-built power supply, allows it to adeptly support up to four customizable light guides, negating the need for external adapters. User operations are a breeze, thanks to intuitive exposure controls, foot pedal activation, and the ability to tailor each of the four irradiation channels with adjustable timers and power. Durability is at its core, with robot-grade UV light guide cables that can withstand rigorous use, available in four distinct wavelengths. For those prolonged sessions, its advanced fan-cooling system and temperature sensors ensure the equipment remains at the right temperature. Encapsulated in a contamination-resistant sealed aluminum body, and further secured with a key for authorized adjustments, SkyBeam sets the gold standard for compact, efficient, and secure lighting solutions.



Features



4 Irradiation Channels

The system features 4 independent irradiation channels, each with 0-999.9 second exposure timer and 10 to 100% power adjustment range. Each channel's UV light spot size can be adjusted by replacing the optical lens at the end of its light guide, with the service life of each irradiation channel independently recorded.

Built-in Power Supply

The built-in power supply and compact design ensures the unit occupies minimal space, and eliminates the need to manage an external power adapter.

External Control Interface

The system can be remotely monitored and controlled using isolated logic signals available at the rear panel terminals. The digital logic functions allow high-speed control of the SkyBeam for applications requiring a direct interface with machine controllers or PLCs. Control signals include LEDs on/off and a safety interlock that disables LEDs for operator protection.

Cool Operation

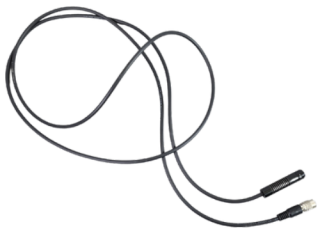
Both convection cooling and fan cooling UV LED light guides are offered. The fan cooling type has better heat dissipation and is suggested for continuous operation. The UV LED light guide has a built-in temperature sensor that monitors the temperature and prevents the light guide from overheating.

Security Key Switch

The system comes with a security key switch that prevents operators from making unauthorized changes to the approved running parameters.

Long-Life Flexible Light Guides

The cable of the UV LED light guides is a 2-meter flexible robot cable, tested to over 10 million bending cycles. 4 wavelengths are available, including 365, 385, 395 and 405 nm.



Dimensions & Specs

- **System Type:** LED Spot Curing System
- **Part #s:** UV3979
- **Input Voltage:** 100–240VAC ±10%
- **Input Current (Max @ 120/240V):** 1.0 Amps at 120V, 0.5 Amps at 240V
- **Irradiance @ 1":** From 900–14,000 mW/cm² UVA (lens dependent)
- **Curing Area:** From 3 mm–15mm spot size (lens dependent)
- **Weight:** 3.25 lbs
- **Size (L x W x H):** 140 mm x 92 mm x 160 mm

System Part Numbers

PART	Item	Details
UV3979-365F	SkyBeam Spot System w/ 365nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-385F	SkyBeam Spot System w/ 385nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-395F	SkyBeam Spot System w/ 395nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-405F	SkyBeam Spot System w/ 405nm LED Fan Cooled Light Guide	Includes 6mm and 12mm lens, length=82mm
UV3979-365C	SkyBeam Spot System w/ 365nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-385C	SkyBeam Spot System w/ 385nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-395C	SkyBeam Spot System w/ 395nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm
UV3979-405C	SkyBeam Spot System w/ 405nm LED Convection Cooled Light Guide	Includes 6mm and 12mm lens, length=85mm

Light Guide Part Numbers

PART	Item	Details
UV4053-365F	365nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-385F	385nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-395F	395nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4053-405F	405nm LED Light Guide, Fan Cooled	Includes 6mm and 12mm lens, length=82mm
UV4054-365C	365nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-385C	385nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-395C	395nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm
UV4054-405C	405nm LED Light Guide, Convection Cooled	Includes 6mm and 12mm lens, length=85mm

Light Guide Lens Part Numbers

PART	Spot Size	Irradiance at Distance	Wavelength
UV4030-12MM	12mm	1.5 W/cm ² at 27mm	365nm
UV4030-6MM	6mm	5.6 W/cm ² at 13mm	365nm
UV4030-4MM	4mm	8.5 W/cm ² at 7mm	365nm
UV4030-3MM	3mm	11 W/cm ² at 6mm	365nm
UV3982-15MM	15mm	1.4 W/cm ² 1.6 W/cm ² 1.9 W/cm ² at 28mm	385nm / 395nm / 405nm
UV3982-12MM	12mm	1.7 W/cm ² 2.0 W/cm ² 2.3 W/cm ² at 26mm	385nm / 395nm / 405nm
UV3982-6MM	6mm	5.3 W/cm ² 6.3 W/cm ² 7.4 W/cm ² at 11mm	385nm / 395nm / 405nm
UV3982-4MM	4mm	10.0 W/cm ² 12.0 W/cm ² 14 W/cm ² at 5mm	385nm / 395nm / 405nm

Accessories

PART	Item	Details
UV4045	Foot Switch, Exposure Control	With flying leads for attachment to controller terminal block
UV4046	Security Switch Replacement Keys	Set of two
UV4047	Power Cord	AC Power Cord, 120V US Plug for SkyBeam
UV2232	UV/IR Protective Safety Glasses	Sport contour, 5.0 shade
UV1890	UV Protective Face Shield	Lift-up face shield ideal for maximum protection, 5.0 shade
UV4006-XX	LEDCure Radiometer	Dynamic range 0.4-40W/cm ² . Available in L365, L385, L395, L405.
UV4244-12	LEDCure Radiometer Light Guide Fixture	Measure spot guide output with EIT radiometer

Ultra-Compact, UV Spot Curing System

The SunSpot 2 is an advanced, ultra-compact light curing system offering unmatched high-intensity illumination, ideal for rapid curing. Designed with efficiency in mind, it boasts a low cost of ownership, facilitated by its long-lasting UV/visible arc lamp and durable light guide, ensuring consistent performance over time. Despite its lightweight, 6-lb frame, the SunSpot 2 packs a punch with a potent 200W lamp, providing industry-leading intensity and speedy curing compatible with high-speed production automation equipment. With its precise controls and foot pedal activation, the SunSpot 2 allows for easy manipulation of exposure times, making the curing process seamless and efficient. Its innovative design supports multi-pole light guides, allowing simultaneous light delivery to multiple curing zones and eliminating the need for additional lamp systems. Safety is also a priority, with features like a quick-change lamp and safety interlocks to provide maximum operational protection.



Features



Precision Timer & Shutter Control

Employ the accurate 1 to 99-second pedal-controlled exposure timer and shutter for precise curing duration. Switch easily between timed and manual modes as the shutter stays open while the pedal is engaged for operator convenience.

Intuitive Intensity & Power Adjustment

Adjust the intensity seamlessly with the front panel's locking intensity control, offering a 35 to 100% combined power adjustment range. This feature enables users to manage the curing process effectively, accommodating various material sensitivities.

External Control Compatibility

A rear-panel connector facilitates integration with external monitoring and control systems, including PCs and PLCs. Control signals such as 'lamp off', 'shutter open', and 'hour meter reset', along with monitoring signals, provide a comprehensive control suite.

Smart Lamp Auto-Dimming

Experience intelligent operation with the lamp's auto-dimming feature when the shutter is closed. This function not only extends the lamp's life but also reduces power consumption and heating, ensuring efficient performance.

Safety & Security Mechanisms

Multiple safety interlocks enhance operational safety. The shutter closes automatically if the light guide is removed, and power is disconnected when the lamp cover is removed.

Optimized Cooling System

With regulated dual fans, the SunSpot 2 guarantees cool operation. This efficient cooling system ensures reliability and extends the lamp's life to more than 2000 hours, offering consistent performance over time.



Dimensions & Specs

- **System Type:** Focused Spot System w/ Light Guide
- **Part #s:** UV1853 (120VAC); UV2132 (240VAC)
- **Lamp Power:** 200W
- **Input Voltage:** 100-120 / 200-240 VAC \pm 10%
- **Input Current (Max @ 120/240V):** 4.7 Amps at 120V; 2.5 Amps at 240V
- **Irradiance @ 1":** 18,000 mW/cm² UVA
- **Curing Area:** 1.5"/3.0" spot size at 1.5"/3.0" distance
- **Weight:** 5.92 lbs
- **Size (L x W x H):** 4.05 x 8.64 x 10.51"

System Part Numbers

PART	Item	Details
UV1853	SunSpot 2, 120VAC	Ultra-compact, UV spot light curing system. The default configuration comes with heat filter assembly, 200W UVA enhanced arm lamp/reflector module, shutter control foot pedal, 1m x 5mm liquid filled light guide, UV/IR protective OTG glasses (5.0 shade with case), AC power cord (USA standard) and SunSpot 2 manual.
UV2132	SunSpot 2, 240VAC	

Accessories

PART	Item	Details
UV2554	Heat Filter Assembly	300-450nm range transmission (smaller filter, further from lamp)
UV1973	Optional Filter	Transmission >300nm (large filter, closer to lamp)
UV1860	Shutter Control Foot Pedal	6' cable w/DSUB connector
UV2156	PLC I/O Control Cable	Interface to back 9 pin DSUB connector from PLC
UV2304	Replacement Fan Filter Elements	Inlet/Outlet, 45 PPI
UV2136	AC Input Fuse	Time Lag 6.3A, 250VAC, 5.2x20mm Glass
Multiple	Power Cords	Multiple types available
UV4783	UV/IR Protective Safety Glasses	Sleek OTG (fit over prescription eyewear), 5.0 shade
UV2232	UV/IR Protective Safety Glasses	Sport contour, 5.0 shade
UV0567-SA	Spot Cure Radiometer	Operating range 0.2-19.99W/cm ² , Spectral range 320-390nm, w/ case
UV1451-H	Power Puck II Radiometer	4 bandwidths, range: 0.1-10W/cm ² (UVA, UVB, Visible), 0.01-1W/cm ² (UVC)
UV4244-10	Puck Radiometer Light Guide Fixture	Holding chuck collet: 10mm. For light guides: UV0570, UV0571, UV0572
UV1854	SunSpot 2 Instruction Manual	Usage and maintenance info for SunSpot 2 system

Replacement Lamps

PART	Item	Details
UV1866	UVA Enhanced Lamp	200W Short Arc Lamp Module
UV2170	UVB Enhanced Lamp	200W Short Arc Lamp Module
UV4792	Visible Enhanced Lamp	200W Short Arc Lamp Module

Liquid Light Guides (Single Pole)

PART	Details
UV0570*	Liquid Light Guide, 1m x 5mm
UV0571*	Liquid Light Guide, 1.5m x 5mm
UV0572*	Liquid Light Guide, 2m x 5mm
UV0774	Liquid Light Guide, 1m x 8mm
UV0775	Liquid Light Guide, 1.5m x 8mm
UV0776	Liquid Light Guide, 2m x 8mm
UV1195	Liquid Light Guide, 3m x 8mm
UV3381*	Liquid Light Guide, Deep UV, 1m x 5mm
UV1508*	Liquid Light Guide, Deep UV, 1.5m x 5mm

Fiber Light Guides (Single Pole)

PART	Details
UV0765	Fiber Light Guide, 1m x 5mm
UV0766	Fiber Light Guide, 1.5m x 5mm
UV0767	Fiber Light Guide, 2m x 5mm
UV0768	Fiber Light Guide, 1m x 8mm
UV0769	Fiber Light Guide, 1.5m x 8mm
UV0770	Fiber Light Guide, 2m x 8mm

Multi-Pole Light Guides

PART	Details
UV2168	2 Pole Liquid Light Guide, 1m, 5mm Common End
UV2587	4-Pole Liquid Light Guide, 1m, 5mm Common End
UV3702	2 Pole Fiber Light Guide, 1m, 5mm Common End
UV3703	2 Pole Fiber Light Guide, 1.5m, 5mm Common End
UV3704	2 Pole Fiber Light Guide, 2m, 5mm Common End
UV0575*	2 Pole Fiber Light Guide, 2m, 5mm Common End (Metal Sheathing)
UV2005	3 Pole Fiber Light Guide, 1m, 5mm Common End
UV0794	4 Pole Fiber Light Guide, 1m, 5mm Common End
UV0795	4 Pole Fiber Light Guide, 1.5m, 5mm Common End

*stocked light guides. Other light guides are special order.